

THE IMPOSTOR PHENOMENON: A DESCRIPTIVE STUDY OF  
ITS INCIDENCE AMONG REGISTERED NURSE PRECEPTORS

by

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A THESIS

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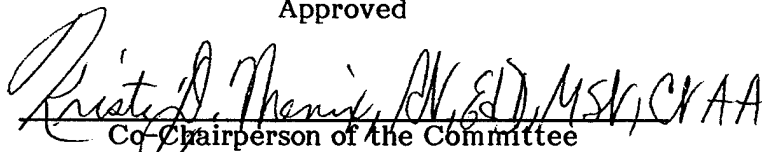
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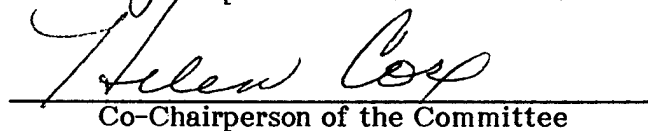
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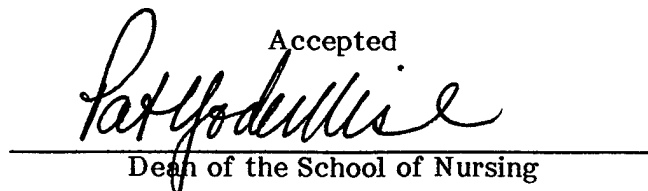
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## ABSTRACT

Intelligent high-achievers, who believe they are less intelligent and less competent than others perceive them, may suffer from the impostor phenomenon. The impostor phenomenon describes an internal experience of intellectual phoniness. Impostors hide deep feelings of inadequacy, fearful others will discover their secret. The study used a descriptive correlational design to determine the incidence of the impostor phenomenon among registered nurse preceptors. Nursing preceptors are usually high-achieving professionals tasked with the responsibilities of their patient care assignments as well as teaching, counseling, inspiring, role modeling, and supporting the growth and development of new nurses within the clinical setting. Pender's 1996 Health Promotion Model served as the conceptual framework.

One hundred twenty-nine RN preceptors practicing throughout Texas ( $N=129$ ) completed a two-part questionnaire, consisting of the Clance Impostor Phenomenon Scale and items associated with preceptors' self-reported feelings and experiences. Using parametric and non-parametric statistics and descriptive methods, data analysis revealed that about 10% ( $n=13$ ) of the participants experienced moderate to intense levels of the impostor phenomenon. A significant negative correlation was found between impostorism and self-perceived qualification for the preceptor role. This study further compared the use of a specific cutoff score to determine impostorism in lieu of dividing the sample at the median into high-level and low-level impostor groups. Findings are useful in understanding nurse preceptors' stressors and need for support.

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## CHAPTER I

### INTRODUCTION TO THE STUDY

#### Purpose

The impostor phenomenon is described as an "internal experience of intellectual phoniness" (Clance & Imes, 1978, p. 241) resulting from a secret belief that one has fooled others about one's intellectual abilities and does not deserve earned success and recognition. The impostor phenomenon involves intense feelings of incompetence despite one's accomplishments as well as fear others will discover the "truth" regarding perceived intelligence and competence (Langford & Clance, 1993).

Intelligent high-achievers, who are unable to attribute professional and intellectual success to their own personal abilities and talents, may suffer from the impostor phenomenon. Nursing preceptors are usually high-achieving staff nurses tasked with the responsibilities of their patient care assignments as well as teaching, counseling, inspiring, role modeling, and supporting the growth and development of new nurses within the clinical setting (Morrow, 1984). Furthermore, Halstead and Billings (1998) indicated nurse preceptors are the experts paired with novice nurses in order to orient newcomers to their work environments. Superior knowledge and competency are expected of these nurse preceptors (Kramer, 1993).

The demands and expectations inherent in the preceptor role, combined with the acknowledgement that nursing preceptors are experts, could place nurse preceptors at high risk for experiencing feelings associated with the impostor phenomenon. Therefore, the purpose of this descriptive, correlational study is to determine the incidence of the impostor phenomenon among nurse preceptors.

## Background and Significance

### Impostor Phenomenon

According to Clance and O'Toole (1988), Clance and Imes originated the term impostor phenomenon (IP) upon noting paradoxical tendencies in successful female professionals (Clance & Imes, 1978). These professionals came from academia, nursing, medicine, law, and social work and included graduate and undergraduate students. These high-achieving women tended to deny academic or intellectual abilities despite scoring highly on achievement tests, obtaining scholastic honors and advanced degrees, and earning the respect and admiration of peers (Clance & Imes, 1978). Furthermore, the women believed such accomplishments were not the result of authentic abilities, but resulted from such circumstances as working harder than others, good luck, knowing the right people or being in the right place at the right time, personal charm, or manipulating others' opinions (Clance & O'Toole, 1988).

Beginning in the early 1980s, research has led to a deeper understanding of the extraordinary nature of the IP. Seemingly unable to internalize a sense of competency and talent, impostors strive to prevent exposure as unworthy and incompetent (Langford & Clance, 1993). Impostors hide deep feelings of inadequacy concerning intelligence and competency, wearing "masks" to hide their true identity from others (Clance, 1985). Key to the IP is the portrayal of a "phony" self to others through a mask that results in impostors feeling fake.

Research has shown that both men and women experience the IP to a similar degree, although it was originally proposed as a female phenomenon because of the stereotypical view of females as less capable than men (Langford & Clance, 1993). Clance, Dingman, Reviere and Stober (1995) proposed that the IP is rooted in interpersonal and social contexts, because early family dynamics and female gender-role socialization in a primarily male-normed social system, form the backdrop for impostor feelings.

Clance and Imes (1978) identified a cyclical nature to the impostor experience, resulting from the fear of discovery. Impostors are professionally competent people; however, they lack internal confidence in their abilities. Afraid others will realize they are not intelligent and capable, impostors are driven to achieve, studying or working very hard to avoid detection as fakes (Harvey & Katz, 1985). As a result of such effort, impostors are rewarded with good grades or superior performance and thus, earn approval, praise and recognition from others (Clance & Imes, 1978). Impostors may temporarily experience good feelings about their new achievements and higher status, but good feelings and enjoyment eventually begin to fade. Impostors are forced to repeat the cycle with every success because the underlying sense of phoniness remains (Clance & Imes). Each new task or event represents a potential for failure and fear of exposure (Harvey & Katz, 1985).

According to Clance and Imes (1978), impostors report such clinical symptoms as overall anxiety, lack of self-confidence, depression, and frustration. In addition, fatigue and stress originate from the work and effort required by the repetitive cycle of achievement for which the impostor receives no lasting satisfaction (Clance, 1985). Langford and Clance (1993) indicated impostor feelings involve constant worry, depression, and anxiety stemming from the pressure to live up to images of success and the need to "look smart" (p. 498).

Suffering from the IP has the potential to detrimentally impact professional careers across time. The IP can interfere with the self-actualization of its victims as the "anxiety, self-doubt, fear of failure, and guilt about success undermine their ability to function at their highest level" (Clance & O'Toole, 1988, p. 53). Thus, individuals with IP will potentially avoid opportunities to excel or advance within their chosen professions, and hence not achieve to their full potential.

### Preceptorships

The use of preceptorships to facilitate the transition of novice nurses into more independent professionals is common practice within academic and health care organizations. Preceptorship hinges on the contractual relationship between a more experienced person and a less experienced one. Whether or not the relationship is a formal one, the importance of a quality relationship between the two participants is paramount to the success of the preceptorship (Ferguson, 1996).

According to Morrow (1984), preceptorships in nursing education originated in the 1960s among nurse practitioner programs when physicians assumed responsibility for the clinical practicums of nurses learning assessment skills. Shamian and Inhaber (1985) indicated the term preceptorship first appeared as a classification in the 1975 International Nursing Index. During the nursing shortage of the 1980s, hospitals promoted preceptorships as a strategy to increase retention of nurses (Bellinger & McCloskey, 1992). Brasler (1993) linked the growth of preceptorships to the high cost of recruiting nurses during the shortage as hospitals sought unique ways to minimize high turnover rates and train new nurses as rapidly and effectively as possible.

Today, health care organizations use preceptorships to orient new staff as well as provide learning experiences for senior nursing students nearing graduation, facilitating the transition from student to staff nurse (Halstead & Billings, 1998). Kramer (1974) coined the term "reality shock" for the gap experienced by nurses between education in nursing school and practice after graduation. Preceptorships are considered a resource to cushion reality shock (Bain, 1996; Clayton, Broome & Ellis, 1989; Kramer, 1993; Myrick, 1988; Shamian & Inhaber, 1985). Preceptorships in nursing education have received widespread acceptance; the value of the preceptor model has been well documented in the literature (Brasler, 1993; Byrd, Hood & Youtsey, 1997; Oermann, 1996; Shamian & Inhaber, 1985). The preceptor model is expected to

become increasingly popular in the future as nurse educators seek effective ways to control costs associated with nursing education (Nehls, Rather & Guyette, 1997).

### Preceptors

Preceptors are generally conceptualized as staff nurses working one-on-one with novice nurses or nursing students to promote learning. Nurse preceptors juggle role demands resulting from working with learners and their regular nursing responsibilities such as patient care assignments, administrative duties, committee membership and continuing education requirements, which remain crucial parts of preceptors' responsibilities (Myrick & Barrett, 1994).

Today's increasing emphasis on the preparation of advanced practice nurses (APNs) has led to the expansion of programs using the preceptor model for graduate clinical education (Shah & Polifroni, 1992). Hence, increasing numbers of APNs are serving as preceptors in order to develop the skills and clinical judgement abilities of nurse practitioner students, neophyte nurse practitioners (NPs) and clinical nurse specialists (CNSs).

Mundy (1997) indicated that pairing preceptees with a preceptor brings the student in contact with "the seasoned nurse's vast store of knowledge" (p. 66). In addition, Mundy stated:

The profile of an excellent clinical preceptor is a competent, confident registered nurse who exhibits enthusiasm in the work environment. The preceptor must have excellent clinical skills, a high level of interpersonal communication skills and a strong desire to work alongside someone with less experience. (p. 66)

It is evident that much is expected from nurse preceptors no matter the setting or practice level. Functioning in the preceptor role requires preceptors to excel in nursing practice and to accept greater responsibility than do peers not involved with training inexperienced individuals. The preceptor role calls for commitment to share knowledge and expertise in close working relationships

with others. Health care organizations and schools of nursing depend upon preceptors to help ensure safe, quality patient care.

### Statement of the Problem

Most preceptors volunteer to precept novice nurses; however, sometimes the role of preceptor is written into the job description and participation is expected as a condition of employment. Up to one third of the clinical agencies surveyed by Oermann (1996) required nurses to be preceptors whether nurses wanted the role or not. In addition, regardless of whether nurses desire to be preceptors, the workload for clinical nurses is already heavy, and the preceptor role adds additional work and accompanying stress (Byrd et al., 1997; Myrick & Barrett, 1994). Nurses who already feel overwhelmed with the increasing demands of nursing may view non-voluntary preceptorship as an added burden (Mundy, 1997). Another potential stressor faced by nurse preceptors is the risk of placing their professional licenses in jeopardy if nursing students practice unsafely (Rittman & Osburn, 1995). Limón, Bargagliotti and Spencer (1981) indicated that the preceptor role may cause preceptors to question their clinical competence, theory background, and teaching skills, when concurrently, the intensity of the preceptor relationship is already adding a higher level of stress to their workload.

Some health care facilities or schools of nursing provide nurses with preparation for the preceptor role (Myrick & Barrett, 1994; Piemme, Tack, Kramer, & Evans, 1986; Shamian & Inhaber, 1885). However, others do not require or offer any training (Barrett & Myrick, 1998; Oermann, 1996).

Arena and Page (1993) identified the potential for CNSs to experience the IP due to demanding role expectations. Although nurse preceptors generally function differently than CNSs, some role similarities exist. Like the CNS role, the nurse preceptor role may include consulting, leading, and managing in addition to educating.

Expecting nurse preceptors to have expert knowledge, clinical competence, and the ability to teach, in addition to role modeling, can lead to high potential for impostor feelings. Thus, the impostor phenomenon for preceptors could be described as a dynamic psychological pattern of behavior and emotions whereby preceptors deny personal attributes of intelligence and competency. Such preceptors might believe that the truth, if discovered, would expose them as unintelligent or incompetent to fulfill the preceptor role.

Despite the satisfaction and rewards inherent in the preceptor role, nurse preceptors suffering from the IP could be caught in the dilemma of feeling extremely inadequate for the task of teaching and socializing new nurses, yet would be unwilling to let anybody know. Not only do the cyclical or chronic stressors associated with the IP (i.e., anxiety, depression, and fatigue) potentially impact the achievement of a sense of competence about being preceptors, but these stressors may jeopardize nurse preceptors' own physical and emotional health.

Research documenting the existence of the IP among nurse preceptors or CNSs was not found in the literature reviewed. Yet, it is important to identify the degree to which nurse preceptors experience the IP to more fully understand this potential source of high stress facing nurse preceptors. This awareness is important for nursing leaders such as unit managers, staff educators, and faculty members. Nursing leaders informed regarding the existence of IP among nurse preceptors would be more able to effectively support preceptors, thus promoting the quality of preceptorship programs. Lastly, results of the proposed study can assist nurse preceptors to identify their own impostor feelings and experiences. When impostors realize their experiences are common enough to have been given a name, such knowledge can provide relief and is often a first step toward seeking help to overcome the burden of the IP (Clance, 1985). Thus, in addition to adding to the knowledge base of the nursing discipline, the study can help to promote a more healthful life among nurse preceptors experiencing IP.

### Research Questions

The following research questions guide the study:

1. What is the incidence of the impostor phenomenon among nurse preceptors?
2. Is there a relationship between the intensity of impostor feelings and demographic, nurse-specific, or preceptor-specific study variables?
3. What differences exist among study variables between nurse preceptors identified as impostors and nurse preceptors identified as non-impostors?

### Conceptual Framework

Pender's (1996) revised Health Promotion Model (HPM) served as the framework for the study (Figure 1.1). Constructs central to social cognitive theory form a theoretical basis for the HPM (Pender, 1996). A central principle of social cognitive theory, triadic reciprocal causation or reciprocal determinism, holds that behavior, inner personal factors (cognition, emotions and biological events) and environmental events are the mutually interacting influences ultimately determining human behavior (Bandura, 1986). The interaction of behavior, cognition, emotion, and environmental influences is seen in the Pender (1996) model. According to the HPM, each person's unique personal characteristics and experiences affect all subsequent actions. "Prior behavior is proposed as having both direct and indirect effects on the likelihood of engaging in health-promoting behaviors" (Pender, 1996, p. 67). In addition, Pender (1996) proposed that prior behavior indirectly affects health-promoting behavior through perceptions of self-efficacy, benefits and barriers to action, and activity-related emotions.

An individual's sense of self-efficacy not only influences feelings of competency over a specific behavior or a set of behaviors in a specific context,



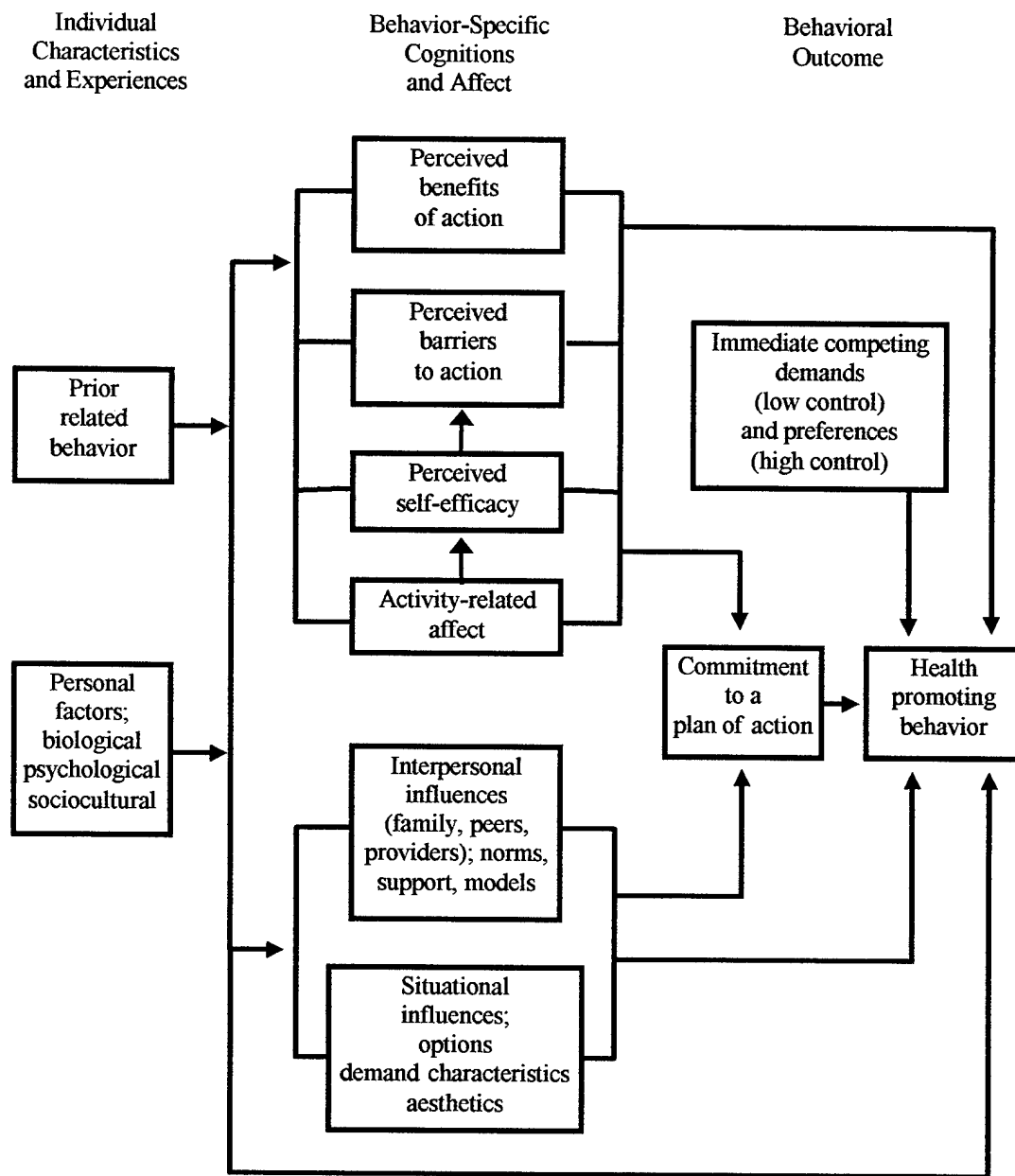


Figure 1.1. Health Promotion Model.

Note. From *Health Promotion in Nursing Practice: Third Edition* (p. 67), by N. J. Pender, 1996, Stamford, CT: Appleton & Lange. Copyright 1996 by Appleton & Lange. Reprinted with permission.

but can also apply to a general level of competence and effectiveness (Maddux, 1995). Bandura (1990) suggested self-efficacy refers to a person's belief about capabilities to summon the motivation, cognitive resources, and courses of action needed to exercise control over task demands. Levels of self-efficacy have predictive value: feeling high levels of efficacy and skill about one's performance is likely to encourage one to engage in relevant behaviors more frequently than feeling inept and unskilled (Pender, 1996).

The cyclical nature of the IP depends on the interaction of behavior, cognition, emotion, and environment. In addition, impostors seem to suffer from low self-esteem with respect to the area of achievement, i.e., self-efficacy, without displaying a generalized lack of self-esteem (Langford & Clance, 1993). Low self-esteem with respect to achievement requires a system of taxing, anxiety-producing defenses (Langford & Clance, 1993). Thus, according to Pender's (1996) HPM, low self-efficacy of individuals suffering from the IP would affect the individuals' abilities to engage in health-promoting behaviors.

### Definitions

#### Impostor Phenomenon

Conceptual definition. Subjective feelings of phoniness and incompetence as described by the IP literature.

Operational definition. Tendency for IP feelings as measured by the Clance Impostor Phenomenon Scale (Clance, 1985).

#### Nurse Preceptor

Conceptual definition. A registered nurse (RN) who assumes the responsibility of role model, teacher, counselor, and resource person for a preceptee.

Operational definition. A practicing RN sanctioned as a preceptor by unit nurse managers of a large healthcare system or by school of nursing faculty of a large, multi-purpose health sciences center. The RN functions as a preceptor for

preceptees who participate in an orientation, socialization, or individualized educational program. The preceptor may or may not have received formal preparation or training for preceptor role responsibilities.

#### Preceptee

Conceptual definition. An undergraduate or graduate nursing student, inexperienced new employee, or nurse in a new practice setting who participates in an orientation, socialization, or individualized educational program in the clinical setting.

Operational definition. Individuals considered by the healthcare organization or school of nursing to fit the above definition.

#### Assumptions

Several assumptions were inherent in the research:

1. Because the IP is a complex psychological phenomenon, the proposed study does not attempt to explore its origins.
2. Self-efficacy is a central construct to the IP.
3. Nurse preceptors are high achieving professionals.
4. Registered nurses practicing in healthcare agencies or in other employment settings are able to speak and read English.
5. Both preceptors and preceptees contribute to the often intense relationship existing as a result of preceptorships. Preceptees, by virtue of the adult learner role within this dynamic relationship, are assumed to bear the ultimate responsibility for self-learning. This assumption in no way lessens the reciprocal responsibility of preceptors to facilitate learning. However, this situation means that preceptors and preceptees are each influenced by potentially different factors within the HPM.

### Limitations

Limitations, which may have affected the research process or study findings, include the following:

1. Participants may find it difficult to separate their preceptorship role from their professional nursing role. Thus, the data may not allow for discrimination between impostor nurses and impostor preceptors.

2. The reliability of self-reporting questionnaires, including assessment tools to measure the IP, is subject to participants' willingness to communicate true feelings.

3. No plan is made to control for extraneous variables concerning the variety in preceptorship programs or nursing orientations. Each health care facility and nursing unit has its own environment influencing many aspects of the preceptorship that the proposed study cannot control.

### Summary

The IP has been recognized as a phenomenon that includes the experience of hiding feelings of inadequacy regarding intelligence and ability. The IP entails repetitive cycles of achievement to avoid detection as intellectual impostor, leading to clinical symptoms such as anxiety, lack of confidence, depression, fatigue, and worry. High-achieving professionals, unable to internalize their success, may be experiencing impostor tendencies. In nursing preceptorships, experienced nurse preceptors interact with novice nurses or nursing students to teach, role model, and support the development of the new nurse in the clinical setting. Preceptorships place nursing preceptors, often considered experts in the clinical area, into demanding roles requiring superior knowledge and competency. Because of these role demands, this study sought to investigate the existence of the IP among RN preceptors.

## CHAPTER II

### REVIEW OF THE LITERATURE

#### Introduction

The purpose of this chapter is to present a review of relevant literature with emphasis on empirical research; however, pertinent, non-empirical literature that more fully explicates the nature of the impostor phenomenon (IP) is discussed. Research studies on the IP in nurses, as well as non-nurses, are reviewed. Studies of nurse preceptors are explored to illustrate the roles and characteristics of preceptors and the potential rewards of serving as preceptors. Research based on the Health Promotion Model (HPM) (Pender, 1996) will clarify the nature of self-efficacy.

#### The Impostor Phenomenon

Individuals suffering from the IP are highly successful people, respected by colleagues for academic and professional excellence. Yet, impostors are convinced the intelligence and competence others perceive in them are merely part of a façade, and eventually the truth will be discovered (Clance & Imes, 1978).

The literature revealed a profile of the IP victim with multiple, potential manifestations (Clance & O'Toole, 1988; Holmes, Kertay, Adamson, Holland & Clance, 1993). Individuals may experience strong degrees of the IP without having all of the following characteristics:

- a. introversion,
- b. generalized anxiety,
- c. fear: of failure; of evaluation; of shame and humiliation; that successes cannot be repeated; that others will discover lack of knowledge or abilities,

- d. difficulty accepting praise or believing it is deserved; however, negative feedback is believed and remembered as evidence of deficiency,
- e. overestimation of others in conjunction with underestimation of self,
- f. may believe ritualistic behaviors necessary for success,
- g. may prefer low-level or unchallenging positions.

Two scales have been developed to measure impostor feelings: the Harvey Impostor Phenomenon Scale (Harvey, 1981) and the Clance Impostor Phenomenon Scale (Clance, 1985)

#### Non-Nurse Impostor Phenomenon Studies

Cozzarelli and Major (1990) administered the Clance IP Scale (Clance, 1985) to 137 undergraduate social psychology students. The hypothesis was that students with the IP (impostors) would have higher overall grade point averages, would be more anxious, and would expect to receive a lower grade prior to a mid-term examination than non-impostor students. Although the impostors and non-impostors did not differ in grade point average or in actual examination performance, the remainder of the hypothesis was supported in that the impostors did have more anxiety and lower pre-test grade expectations.

Hayes and Davis (1993) studied interpersonal behavior flexibility, tendency toward Type A behavior (as in Type A versus Type B behavior) and the IP in 83 college students. Interpersonal flexibility was seen as possessing a variety of responses in one's behavioral repertoire and the ability to choose the most appropriate and effective behavior for the current situation. Although no differences in interpersonal flexibility or Type A behavior were found for gender, female subjects had significantly higher scores on the Clance IP Scale than did males [ $t(81) = 2.56, p < .02$ ]. Hayes and Davis reported interpersonal flexibility as negatively correlated with the IP for men [ $r = -.48, p < .02$ ] and women

[ $r = -.52$ ,  $p < .01$ ]. However, Type A behavior was correlated positively with the IP for men [ $r = .40$ ,  $p < .05$ ], but negatively for women [ $r = -.39$ ,  $p < .02$ ]. Hayes and Davis suggested that because many Type A characteristics (e.g., competitiveness, achievement striving, and need for recognition) are considered to be masculine, males in the sample who felt pressured to endorse Type A behavior to appear masculine would experience increased self-perception of fraudulence if such endorsement was contrary to their true attitudes and emotions.

Holmes et al. (1993) examined the reliability of the Harvey Impostor Phenomenon Scale (HIPS) (Harvey, 1981) and the Clance IP Scale (Clance, 1985). They compared the ability of the two scales to distinguish between independently identified impostors and non-impostors in a clinical and non-clinical sample. Clinical subjects were obtained through referrals from experienced clinicians, which classified the clinical subjects as impostors or non-impostors. The Clance IP Scale was deemed more sensitive than the HIPS.

King and Cooley (1995) investigated the relationship between the IP and 127 undergraduate students' achievement behaviors and students' perceptions of the achievement orientations of the family in which they grew up. Results showed females had significantly higher Clance IP Scale scores ( $M = 59.47$ ) than males (53.40),  $t(125) = 2.53$ ,  $p < .05$ . In addition, the Clance IP Scale was positively correlated with greater family achievement orientation as measured by an achievement orientation subscale of a Family Environment Scale [ $r(126) = .21$ ,  $p < .05$ ]. Findings also showed that higher levels of the IP were associated with higher GPA and more time spent on academic endeavors for females, but not for males (King & Cooley, 1995).

To summarize, the studies reviewed of the IP in non-nurses indicated that females had significantly higher impostor scale scores than did males and also spent more time on academic endeavors. The IP was negatively correlated with

interpersonal flexibility in both genders and with Type A behavior in women, yet positively correlated with Type A behavior in men.

#### Impostor Phenomenon Studies of Nurses

Early exploratory research of the IP among registered nurses was done by Smith-Clark (1988) to validate the HIPS and to investigate the IP in a non-academic population. The researcher mailed questionnaire packets to the 300 registered nurses living in one Southern California town, a limitation affecting the generalizability of her findings. She reported that the HIPS scores ranged from 4 to 58 based on 0-84 possible points. Smith-Clark used the sample median score of 24 to divide the sample ( $n=110$ ) into two groups: low impostors ( $n=57$ ) and high impostors ( $n=53$ ). Impostorism was normally distributed throughout the sample and had no significant relationship to years in the nursing profession, years in present position, or academic nursing preparation. Associate and diploma prepared nurses tended to experience stronger IP feelings. Birth order and self-perceived atypicality regarding career were not significantly related to the IP. Smith-Clark defined self-perceived atypicality as viewing one's self as different or unique in some aspect of life.

Smith-Clark (1988) also examined the relationship between the IP and locus of control, defined as how a person "perceives his or her ability to exert control over the environment" (p. 46). Smith-Clark reported that nurses with an external locus of control were more likely to experience stronger impostorism while internally controlled nurses were more likely to experience less impostorism. The researcher stated, "The level of significance was ' $p < .06$ ,' and the contingency coefficient was 0.18" (Smith-Clark, 1988, p. 99). Smith-Clark found that 81.5% of nurses who reported strong impostor feelings also reported lower self-esteem ( $X^2 = 39.62$ ,  $p < .001$ , contingency coefficient = .52). This finding indicated that as impostor feelings increased, self-esteem decreased. In contrast, Langford and Clance (1993) stated that original research by Harvey



(1981) indicated it is possible for negative feelings to exist about self in the area of achievement and still have generally adequate self-esteem.

Marcantuono (1990) experimented with 120 nurses in an attempt to induce impostor feelings in unknowing subjects. Nurses, randomly assigned to experimental and control groups, received a bogus test of professional competency as well as other instruments to measure variables such as depression and self-regard. Marcantuono found a positive correlation between the IP and depression and a negative correlation between IP and self-regard, indicating that as feelings associated with IP increased, self-regard decreased. Results also showed a negative correlation between IP and years of experience in nursing, meaning that as experience in nursing grew, tendency to experience impostor feelings faded.

Hollingsworth (1995) explored the existence of the IP among enterostomal therapy (ET) nurses, including whether ET training program type or length of experience in ET nursing had any effect on intensity of the IP. Hollingsworth sent both the HIPS and Clance IP Scales to 1,000 ET nurses nation-wide, achieving a return rate of 52.6%. Instead of using the sample median to gauge intensity of impostor feelings, Hollingsworth used her sample mean. The HIPS sample mean (23.84) was similar to the mean of 25.5 obtained by Smith-Clark (1988). On the Clance Scale, 53% of the ET nurses were at or below the mean of 45.3, while 47% were above this mean. Hollingsworth concluded that the IP did exist among ET nurses, but at mild to moderate levels rather than intense levels. The data revealed that the type of ET training program or length of time since graduation (e.g., length of experience as an ET nurse) did not significantly influence the intensity of impostor manifestations. Hollingsworth reported a significant relationship between age and the IP; scores on both scales increased with age up to 48 years, then began to decline.

Lane (1996) explored the incidence of the phenomenon among nurse executives to see if the IP was associated to a greater extent in nurses who

identified with the traditionally feminine sex-role. One hundred thirty female nurses from a professional organization for nurse executives completed the HIPS. Lane's hypothesis that female nurse executives who rated themselves as feminine sex-role type would have higher IP scores, was based on research indicating that success in the corporate business world may require characteristics associated more with androgynous and masculine traits than feminine traits. Results showed the mean IP score equaled 41.58 or 49.5% into the possible range of 0-84, indicating that, in general, nurse executives did not experience high levels of the IP. Her hypothesis was not supported, and, in fact, she reported that Pearson and Spearman coefficients showed statistically significant correlations at the probability level of .000 [sic] (p. 28) between measures of the IP in nurse executives and the masculine sex-role. This finding suggested that to succeed in the contemporary health care environment, female nurse executives may find it necessary to align with traditionally masculine sex-role behaviors (Lane, 1996). Lane suggested it is also possible that in aligning with the masculine sex-role, some nurses experienced higher levels of the IP as an outcome of living out sex-role expectations that were in conflict with their inner identities.

Engberg (1996) found low incidence ( $M = 29.5$ ,  $SD = 14.93$ ) of the IP among her sample of 222 nurse practitioners, physician assistants, and family practice physicians. One-way analysis of variance (ANOVAs) revealed no significant differences in mean IP scores for the subgroups; IP scores by group were remarkably homogenous. Engberg combined the HIPS and Clance IP Scales into one 34 item, 4-point Likert instrument (0 to 3), with a range of 0-102 possible points, which may have confounded interpretation of results. A second limitation was a low response rate (33.6%) to the 656 questionnaires mailed statewide. In addition, Engberg acknowledged that use of the term "impostor phenomenon" on the cover letter, without explanation of what the syndrome

involved, may have confused and insulted some professionals in the sample population.

Ellerie (1997) sampled 109 registered nurse first assistants, using the HIPS. She found a high degree of self-reported competency among the first assistants, concluding that IP did not exist to a significant extent among the subject nurses who were trained for advanced roles in the surgical arena.

Conclusions about relationships between the IP and other variables among samples of nurses are problematic because of inconclusive findings. For instance, certain data suggested no relationship between the IP and years of experience in nursing or academic nursing preparation. However, other data pointed to negative correlations between the IP and years of experience in nursing as well as a greater tendency of associate degree and diploma prepared nurses to experience stronger IP feelings. Among nurses, impostorism was associated positively with nurses' age, identification with masculine sex-roles, external locus of control, and depression, but negatively with self-regard and self-esteem.

### Nurse Preceptors

Bain (1996) noted that much of the literature on preceptors is subjective, anecdotal, and descriptive. However, some empirical research has contributed to knowledge about roles and responsibilities of nurse preceptors as well as the characteristics desirable in nurse preceptors. This section explores the roles and responsibilities of preceptors, characteristics or qualifications of preceptors, and rewards thought to be inherent in the role.

### Roles and Responsibilities of Preceptors

Krichbaum (1994) studied the relationship between behaviors of 36 critical care preceptors and learning outcomes of assigned BSN students ( $n=36$ ). The process-product study empirically explored the link between 24 specific teaching

behaviors (process) and students' cognitive and performance outcomes (product). Preceptors rated their own behaviors on a Likert-type scale developed by the university medical school, and students rated their preceptors' behaviors on a similar scale. The researcher calculated teacher behavior effectiveness means for each specific behavior. Two other instruments, each with established content validity and reliability in critical care, provided measures for cognitive and performance outcomes. Krichbaum reported cognitive gains to be significantly related to preceptor behaviors such as providing opportunities to practice, asking effective questions, and giving timely, specific feedback. Performance was enhanced by behaviors like providing opportunities to observe experienced nurses in practice and the manner in which preceptors asked questions. Enthusiasm for teaching and concern for students' progress positively related to both learning and performance.

Oermann (1996) examined the roles of preceptors, selection criteria, and knowledge and skills needed by preceptors of baccalaureate students by surveying all National League of Nursing accredited BSN programs in the Midwest ( $n=142$ ), achieving a 59.2% response rate. School curriculum coordinators, program directors, and administrators responded to a closed- and open-ended questionnaire developed by the investigator. Respondents ( $n=84$ ) indicated most preceptors supervised only one nurse at a time (74%): the range was 1 to 10 students. Predominant preceptor roles included selecting patients for care by students (69%) and teaching students in the clinical setting (59.3%). Oermann reported that level of education was the primary consideration for selecting preceptors, followed by experience as a staff nurse, implying that more experience is better. Other researchers (Bartz & Srsic-Stoehr, 1994; Beauchesne & Howard, 1996) found that selecting the most clinically experienced nurse as preceptor does not always ensure a quality experience for the preceptee. Despite the stated purpose, Oermann did not report findings that indicated what

respondents said concerning knowledge and skills needed by preceptors undertaking clinical teaching.

In a qualitative study of preceptors of BSN students at one Canadian university ( $n=30$ ), Ferguson (1996) highlighted the importance of increased self-confidence and a sense of self-efficacy as a crucial outcome of a preceptorship experience. Citing Bandura's social learning theory as a framework, Ferguson conducted semi-structured interviews and analyzed the data with a constant comparative technique. A majority of the preceptors spoke of strategies to develop or enhance student confidence such as providing negative feedback in a positive light, drawing attention to areas of weakness rather than focusing on mistakes, accepting students as learners, seeing common mistakes as learning opportunities, speaking diplomatically about student performance, and supporting students in front of clients.

In addition, Ferguson (1996) found that, although increased self-confidence was seldom an expressed intended goal of the students' practical experience, the preceptors believed self-confidence was an important characteristic of nurses. Ferguson also noted that the preceptors felt a primary responsibility to teach students, rather than evaluate them and were uncomfortable with the role of evaluator if the evaluation was for a grade or promotion. Bartz and Srsic-Stoehr (1994) also reported preceptor discomfort with the role of evaluator.

Oermann and Moffitt-Wolf (1997) studied stressors, challenges and threats in clinical practice during initial employment and compared them to perceptions of social support in 35 newly graduated nurse volunteers. Although the subjects experienced a moderate amount of stress, emotions reported during the period were primarily positive. Factors that helped the graduates' learning included consistent preceptors who provided positive reinforcement and guided their learning, self-motivation, a well-planned orientation, hands-on experience, role models on the unit, and practicing skills and procedures more than once.

Subjects identified several factors that inhibited their learning: time limitations, frequent distractions, criticism from staff, questioning by staff, feeling anxious and overwhelmed, and needing more guidance from preceptors than was received. Since preceptors either directly control or exert influence over many of these factors, Oermann and Moffitt-Wolf concluded that graduates need support from preceptors to develop clinical competence.

In order to reveal the nature and utility of the preceptor instructional model, Nehls et al. (1997) employed a qualitative, hermeneutical design, conducting interviews with senior-level undergraduate preceptees ( $n=10$ ), staff nurse preceptors ( $n=11$ ), and university nursing faculty ( $n=10$ ). The preceptor participants had various educational backgrounds and preceptor role experiences. Three themes emerged: learning alongside a practicing nurse; teaching caring practices; and teaching as nursing. Shared meaning present in all interviews was learning nursing thinking. Teaching the reflective, critical thinking practices of nurses was illustrated with an example of a faculty member giving this advice to a preceptor concerned about a student's progress: "She [the student] needs to see you, the decisions you are making, the thought processes" (p. 225).

In summary, significant roles and responsibilities of nurse preceptors included teaching in the clinical setting, evaluating competency of learners, providing positive reinforcement, teaching caring practices and acting as good role models. The reviewed research suggested that higher levels of education and nursing experience were important selection criteria for preceptors and highlighted the importance of preceptors displaying enthusiasm for teaching and concern for students' progress.

#### Characteristics of Preceptors

An early research study on preceptors provided valuable information as to what nurses find helpful in preceptors. McGrath and Princeton (1987) evaluated

an eight year-old preceptor program at one multiservice community hospital. They interviewed several different groups of nurses. Registered nurses ( $n=21$ ), orienting through the program between 1975 and 1982, were asked about the benefits of the program. Responses centered on opportunities to study with caring preceptors. These nurses viewed preceptors as positive persons readily available to guide, support, teach, and mentor them. The preceptors enabled them to gain self-confidence, security, and increased knowledge while they gradually learned new roles. New graduate nurses ( $n=12$ ) were interviewed before starting the program and again several months after completion. Using new graduates' responses, McGrath and Princeton (1987) compiled a composite statement to illustrate what novices desire in preceptors:

A trusting, friendly, nonjudgmental, resource person who will guide and support me in my practice and help me build self-confidence; who will be available for consultation and answer questions about patient care; who will act as a role model for me to emulate; who will be my confidant and serve more as a peer than teacher or instructor; and who will accept me and provide constructive criticism so that I might learn. (p. 135)

This picture calls for preceptors to fill various roles as well as to display many positive qualities in order to meet the multiple needs of novice nurses.

Graduate student nurses returning to school for further education are in positions unlike undergraduate nursing students since they are already licensed and experienced. However, preceptors are used for this situation as well. Shah and Polifroni (1992) interviewed nine Clinical Nurse Specialist (CNS) preceptors regarding the significant positive and negative aspects in their own graduate school clinical preparation that continued to influence their current roles as preceptors. All preceptors indicated experiencing insufficient role preparation during their own CNS training that, in turn, increased their desire to give students as many positive experiences as possible. When the researchers asked the CNS preceptors for specifics concerning positive experiences for their

students, themes of commitment, inclusion in all activities, and accessibility emerged.

Most CNS preceptors interviewed by Shah and Polifroni (1992) believed students to be responsible for their own learning. Despite the heavy emphasis on teaching in the overall CNS role, most preceptors expressed a low level of comfort teaching preceptees. The CNS preceptors generally felt more at ease as facilitators of experience and appreciated students who could readily identify learning needs. The researchers also found that greater numbers of years of clinical experience as a CNS did not make the role of preceptor any easier.

Byrd et al. (1997) surveyed 32 RN preceptors and 42 senior BSN students to identify factors that preceptors and students considered most important to a successful learning partnership and to determine if any differences existed. The researchers designed a data collection tool, "The Learning Partnership Survey" (p. 346), which was reviewed by other faculty members for content validity. Reported split-half reliability of the instrument for the preceptor/student sample equaled 0.99. Overall, preceptors and students judged attitude toward teaching/learning as the most important factor in the development of the learning partnership. Communication skill ranked as the second most important factor, followed by clinical competence. The researchers found preceptors' and students' ranking of factors almost completely opposite. Ability to give and receive constructive criticism and clinical competence were rated by preceptors as the top two factors, respectively. However, students ranked these two as the least important. For students, preceptors' knowledge of the orientation process and compatibility were considered most important; yet, such factors were least important to preceptors. Byrd et al. (1997) concluded that preceptors and students approach learning partnerships from very different perspectives.

Thus, the literature pictured effective nurse preceptors as caring, accessible, competent facilitators of experience, having positive attitudes and commitment toward teaching and learning. Preceptors with such characteristics



were portrayed as readily available to guide, support, and teach preceptees; thus, allowing the preceptees to gain self-confidence, security, and increased knowledge.

#### Rewards of the Preceptor Role

Pond, McDonough, and Lambert (1993) found that of 137 preceptors, 85% ( $n = 109$ ) indicated they desired to continue to act as preceptors. This finding was notable in view of frequent experiences of role ambiguity, little self-confidence and lack of patience on the part of the preceptor, lack of sufficient quality time with preceptees, and hectic work schedules expressed by some nurse preceptors in the sample.

Stevenson, Doorley, Moddeman, and Benson-Landau (1995) undertook an exploratory, qualitative survey to discover benefits and disadvantages of the preceptor role. Thirty nurses with at least two years preceptor experience were asked to provide written responses to the research questions. Respondents ( $n=16$ , 53%) described rewards or advantages and disadvantages of the preceptor role and provided suggestions to make the role more attractive. The final question, "how does the precepting experience affect nurse's practice?" (p. 161) resulted in several themes. Enhancement of knowledge was a primary theme; secondary themes included improved patient care and positive impact on preceptors' self-confidence, self-esteem and self-worth.

The concept of self-confidence appeared in the findings of McGrath and Princeton (1987), Stevenson et al. (1995), and Ferguson (1996). This leads to the conclusion that positive preceptor-preceptee relationships have the potential to improve self-confidence for both individuals involved. Furthermore, such findings raise the possibility that nurses who suffer from the IP may become preceptors, in part, due to unmet personal needs. Functioning as preceptors may contribute rewards that help to meet their needs for increased self-confidence,

self-efficacy, or self-esteem. Thus, enacting the preceptor role may help nurses with IP to fulfill the need to "look smart" (Langford & Clance, 1993, p. 498).

In conclusion, the literature suggested that many nurse preceptors find the preceptor role personally rewarding. Potential rewards identified in the literature included enhanced self-confidence, self-esteem, self-worth, and knowledge.

### The Health Promotion Model

Pender's Health Promotion Model (HPM) first appeared in nursing literature in the early 1980s (Pender, 1996) and was revised slightly in 1987 (Pender, 1996). Empirical evidence generated by research using the 1987 model led to more substantial model revision in 1996. Some researchers questioned the accuracy of certain cognitive-perceptual and modifying factors in the model and the proposed one-way influence of such factors on health-promoting behaviors (Duffy, 1997; Ratner, Bottorff, Johnson & Hayduk, 1994). Thus, as a multivariate paradigm to explain and predict the "health-promoting component of lifestyle" (Pender, Walker, Sechrist, & Frank-Stromborg, 1990, p. 326), the HPM is now bi-directional and more complex. No studies based on the 1996 model were found in the literature; therefore, findings discussed here are based on the 1987 model.

Perceived self-efficacy, the HPM construct of central importance in the IP, was retained in the 1996 version. However, the revised model depicts self-efficacy as having both direct and indirect effects on health promoting behaviors. Self-efficacy indirectly influences health promoting behaviors by affecting commitment to a plan of action and the perceived barriers to action (Pender, 1996). In turn, self-efficacy is directly acted upon by the emotional state in the situation (activity-related affect). Redman (1998) stated, "Efficacy beliefs influence behavior through their effects on behavioral choice, effort expenditure, distress response to taxing conditions, and persistence in the face of difficulties" (p. 10).

Pender (1996) indicated that self-efficacy knowledge comes from four types of information:

(1) performance attainments from actually engaging in the behavior and evaluating performance in relation to some self-standard or external feedback given by others, (2) vicarious experiences of observing the performance of others and their related self-evaluation and feedback, (3) verbal persuasion on the part of others that one does possess the ability to carry out a particular course of action, and (4) physiologic states (e.g., anxiety, fear, calm, tranquility) from which people judge their competencies. (p. 69)

Each of these four sources of perceived self-efficacy has implications for individuals manifesting IP tendencies.

Weitzel and Waller (1990) investigated health-promoting behaviors of 173 white, black, and Hispanic blue-collar workers using the Health Promotion Lifestyle Profile (HPLP), developed by Walker, Sechrist, and Pender (1987). The HPLP is a 48-item instrument containing six subscales: self-actualization, health responsibility, exercise, nutrition, interpersonal support, and stress management. Weitzel and Waller found that the cognitive-perceptual variables in the HPM were better predictors of health-promoting behavior for all three groups than were demographic variables. In addition, self-efficacy was a significant predictor of behavior in all three groups, especially for blacks and Hispanics.

Pender et al. (1990) used the HPLP and other instruments with 589 employees enrolled in workplace health-promotion programs. Findings showed that these employees were more likely to engage in healthy lifestyles if they reported a sense of personal competency in dealing with life situations, considered their personal health status as high, and believed that their health was influenced to some extent, not by chance or fate, but by powerful others.

Volden, Langemo, Adamson, and Oechsle (1990) found significant differences between 478 men and women regarding self-acceptance, overall health-promoting lifestyle profile, nutrition, and exercise. Scores for the women

( $n=129$ ) indicated significantly less self-acceptance than scores for the men, but women scored significantly higher in total HPLP. In addition, exercise was significantly related to several variables, but not to self-acceptance or health responsibility.

Following an extensive literature review on the determinants of health-promoting behavior, Palank (1991) concluded that self-efficacy was significantly correlated with self-actualization, interpersonal support, and stress management as measured by HPLP subscales. Furthermore, Palank indicated that higher levels of self-efficacy appeared to be associated with positive dietary changes and weight loss, increased levels of physical activity and exercise, and smoking cessation.

Alexy (1991) studied the factors that distinguished between participation and non-participation in a worksite health promotion program among 201 randomly selected blue-collar workers. She found that self-efficacy best distinguished between those who participated in the health program and those who did not. Furthermore, Alexy reported that workers who participated in the program were more likely to identify greater benefits and fewer perceived barriers to health promotion activities.

The HPM has been utilized to study physical activity. In males, the variables of self-efficacy and perceived health status predicted physical activity (Desmond, Conrad, Montgomery, & Simon, 1993). In females, participation in an exercise program did not have an impact on the subjects' measures of self-esteem, health status, or health locus of control (Gillis & Perry, 1991). Among 286 adolescents, females reported less prior and current exercise, lower self-esteem, poorer health status, and lower exercise self-schema than did males in the sample (Garcia et al., 1995).

Lusk, Ronis and Hogan (1997) found the 1987 HPM fit well with data on the use of hearing protection in 359 construction workers; however, they suggested an exploratory model that increased the variance from 36.3% in the

1987 HPM to 50.6% in the exploratory model. This exploratory model resembled Pender's 1996 HPM, taking into account interpersonal and situational influences on the use of hearing protection. One conclusion reported was that benefits and barriers to using hearing protection and a related sense of self-efficacy were significant predictors of hearing protection utilization.

#### Health Promotion Model Studies of Nurses

Guided by Pender's 1987 model, Rummel (1991) evaluated hardiness and health value in a volunteer sample of 148 RNs employed in acute care hospitals. Rummel hypothesized that the cognitive-perceptual factors of hardiness and health value would be related to participation in health-promoting behaviors. The researcher considered hardiness a possible correlate of health-promoting behavior because, as a personality characteristic, hardiness shares concepts in common with perceived control and perceived self-efficacy. She defined hardiness as a stress resistance factor, comprised of control, commitment, and challenge that "appeared to help protect individuals from stress-related health problems" (p. 26). The construct of health value was viewed as the importance of health within one's value system. Rummel postulated that, if values guide actions, individuals with high health value would engage in a greater number of health-promoting behaviors than persons with low health value.

Although the correlation was in the predicted direction, health value was not significantly correlated with health-promoting behavior in RNs ( $r = .115$ ,  $p < .082$ ). Rummel (1991) stated that due to the nature of the instrument used to measure hardiness, a positive relationship of hardiness to health-promoting behavior was indicated by a negative correlation. She reported a significant positive correlation between hardiness and health-promoting behavior in RNs ( $r = -.512$ ,  $p < .001$ ). Rummel indicated that hardiness accounted for 26% of the variance in the HPLP and concluded that hardiness was the single strongest predictor of health-promoting behavior in the nurse subjects.

In a descriptive, correlational study designed to explore the relationship between health-promoting lifestyles and psychological stress, ways of coping and demographic variables in hospital nurses, Vines (1991) adapted the 1987 Pender model with other models to create the Stress Process Model. Vines gathered data from 264 randomly selected RNs, employed 36 to 40 hours per week in one of three Southern hospitals. Subjects completed four instruments, including the HPLP, with a response return rate of 59%. Correlation coefficients showed 12 variables were significantly correlated with the HPLP at the .05 level, including psychological stress, ways of coping, age, sex, marital status, education, and experience as RNs and experience in current nursing positions.

Martinez (1992) found that personal health-promoting behaviors of a random national sample of 390 nurse practitioners (NPs) were performed "often" as measured by the self-actualization, interpersonal support, and nutrition subscales of the HPLP. Behaviors measured by the stress management, health responsibility, and exercise subscales were performed "sometimes" by NPs in the sample. Hughes (1995) reported the same results in a smaller ( $n=50$ ), regional sample of nursing faculty.

Findings from health promotion research suggested that self-efficacy, a person's belief about personal capabilities, is associated with health-promoting lifestyles. For example, self-efficacy best distinguished between those who participated in health programs and those who did not. Higher levels of self-efficacy were associated with self-actualization, interpersonal support, and stress management. In nurses, health-promoting behaviors were associated with psychological stress, ways of coping, age, sex, marital status, education, RN experience, experience in current nursing position, and hardiness.

### Summary

Impostor phenomenon research over nearly two decades shows the phenomenon to be a profound psychological pattern in which those experiencing the IP are unable to internalize a sense of self as intelligent, competent, and talented. Researchers have demonstrated a positive correlation between the IP and measures of anxiety and depression; however, negative correlations were found between the IP and interpersonal flexibility, self-regard, and self-esteem. Among RNs, mild to moderate levels of the phenomenon were reported in ET nurses; however, less impostorism was detected among nurse executives, NPs, registered nurse first assistants, and a sample of RNs in general. Impostor tendencies may be greater for associate degree and diploma prepared nurses, as well as nurse executives who identify with masculine sex-role career requirements. The literature revealed inconsistencies regarding length of nursing experience and nurses' ages with respect to impostorism. No research investigating the IP among nurse preceptors was located.

Preceptor research indicated the nurse preceptor role includes facilitating learners' hands-on experience, teaching in the clinical setting, providing positive reinforcement and positive role modeling, boosting self-confidence and self-efficacy, promoting competency, and demonstrating caring to preceptees as well as patients. Among preceptor characteristics that promoted positive learning experiences were such qualities as enthusiasm, caring, positive attitude, acceptance of learners, worthy role model, competence, and good communications skills. Rewards for preceptors may include enhanced self-knowledge, self-confidence, self-esteem, and self-worth as well as other intrinsic and extrinsic rewards.

Empirical research using Pender's HPM has shown that perceived self-efficacy is a significant predictor of health-promoting behaviors. Self-efficacy correlated positively with self-actualization, interpersonal support, and stress management, and may be associated with positive diet changes, weight loss,

and increased exercise. Likewise, a sense of personal competency in dealing with life situations is linked to engaging in healthy lifestyles. Among RNs, hardiness, a stress-resistance factor, correlated positively with health-promoting behaviors as well as years of nursing experience and years of experience in current position. Registered nurses reported engaging "often" in behaviors related to self-actualization, interpersonal support, and nutrition, but only engaging "sometimes" in stress management, health responsibilities, and exercise behaviors.



## CHAPTER III

### METHODOLOGY

#### Introduction

Chapter III includes information on the type of study conducted and describes the target population and processes for sample selection and data collection. The characteristics of the sample are reported, permitting a description of the average nurse preceptor participants. The researcher discusses impostor phenomenon (IP) measurement tools, offering rationale for the choice of instrument used. Instrument reliability for the current study is provided. In addition, this chapter addresses the protection of human subjects. Finally, statistical analyses used to evaluate the incidence of the IP among RN preceptors are discussed.

#### Design

A descriptive correlational design was used for the study. Descriptive designs, useful for exploring naturally occurring situations, are usually conducted without researcher control, since subjects are examined as they exist in the natural setting. Relationships between two or more variables are appropriately examined using a correlational design when a single group is examined (Burns & Grove, 1997).

#### Population and Sample

Burns and Grove (1997) suggested that convenience samples are appropriate for descriptive studies as long as enough data are gathered to allow a thorough description of sample characteristics. Therefore, the researcher used convenience sampling to draw from a target population of RN preceptors practicing in health care situations throughout the state of Texas.

A power analysis was used to assess an appropriate sample size. Cohen (1988) indicated that for a correlation analysis with an alpha of .05, power of 80, and an effect size of 0.3, a sample size of 85 was adequate for the planned statistical analyses.

The study targeted nurses functioning as preceptors as identified by the unit nurse managers of a large healthcare system operating two hospitals in a West Texas city with a population of approximately 200,000. Sample participants were required to be RNs who had assumed the designated responsibility within the agency to precept, orient, or socialize undergraduate or graduate nursing students, inexperienced new employees, or nurses new to a practice setting. Nurse managers were asked to exclude RN preceptors if fulfilling the preceptor role was a job requirement of all RNs on their units and where all RNs on a unit shared equally in preceptor responsibilities. No exclusion criteria existed based on such factors as age, race, ethnicity, gender, or religion. In addition, RN preceptors working with nursing students associated with a large, multi-purpose university health sciences center, in the city and at distant learning sites, were identified by school of nursing faculty at the health sciences center and afforded the opportunity to participate.

### Sample Characteristics

Two hundred sixty-three RN preceptors received research materials in conjunction with this study. Participants returned 130 questionnaires to the researcher; one questionnaire contained inconsistencies regarding the participant's actual preceptor status so it was eliminated from the study. Thus, the final sample consisted of 129 participants, resulting in a 49% questionnaire return rate. This section summarizes results of the descriptive statistical analysis conducted on the demographic, nurse-specific, and preceptor-specific variables. Data related to the IP are reported in Chapter IV.

Average RN preceptors in this study were female, just under 40 years old, and the majority had obtained at least a BSN (Table 3.1). Average participants had almost 13 years of RN experience (Table 3.2) and were employed full-time in a stable job environment, having practiced the same kind of nursing in the same place, an acute care hospital, for about eight years (Table 3.3). They worked mostly with adult clients, perhaps in an intensive care environment.

Regarding their primary role (specialty), 9 participants (7.2%) responded that their work situations included roles other than those shown in Table 3.2. These roles included oncology ( $n=2$ ), psychiatric or mental health ( $n=2$ ), infection control, flight nursing, and ambulatory surgery. Likewise, participants reported that they sometimes trained different types of learners such as paramedic students, high school students, faculty, secretaries, and nurse technicians or aides (Table 3.4).

The study participants ( $N=129$ ) most often reported training new nurse employees (62%), and less often, undergraduate students (50.4%) (Table 3.4). Experience as preceptor varied widely, but on average, preceptors reported over 4.5 years (56.48 months) of experience training others. The minimum and maximum values obtained for months of experience as preceptors and cumulative number of preceptees worked with indicated that the participants ranged in experience from novice to very experienced. Almost three-quarters of the sample ( $n=95$ , 74.2%) indicated they had received no formal preparation or training for their preceptor roles. Participants ( $n=33$ ), who had received some role preparation or training for the role, had less than a day's worth of education (6.25 hours). Although the literature supported the idea that one-on-one preceptorships are optimal, the mean (2.27) indicated that these preceptors worked with an average of over two preceptees at the same time (mode=2). On a 0-100 scale, the RN preceptors reported satisfaction ( $M=75.7$ ) with their preceptor roles as well as the belief that they were qualified ( $M=77.4$ ).

Table 3.1. Gender, Age, and Education  
Characteristics of Sample

Variable	n	Percent	<u>M</u>	<u>SD</u>	Min.	Max.
Gender (n=129)						
Male	23	17.8				
Female	106	82.2				
Age (n=125)			39.7	8.77	24	65
Nursing Education <sup>a</sup> (n=129)						
ADN	22	17.1				
Diploma	40	31.0				
BSN	55	42.6				
MSN	26	20.2				
Doctorate	2	1.6				
Advanced Practice <sup>b</sup>	4	3.1				
Nurse Practitioner Certificate <sup>c</sup>	4	3.1				
Non-nursing Degrees	5	3.9				

<sup>a</sup> Totals do not equal 100% because it was possible to give more than one answer.

<sup>b</sup> Includes post-master's degree

<sup>c</sup> Not advanced practice (e.g., no master's degree)

Table 3.2. Experience and Primary Role  
Characteristics of Sample

Variable	<u>n</u>	Percent	<u>M</u>	<u>SD</u>	Min.	Max.
Years RN Experience (n=129)			12.959	8.42	1	40
Primary Nursing Role <sup>a</sup> (n=129)						
Adult	47	36.4				
Maternal/Newborn	18	14.0				
Pediatrics	17	13.2				
Geriatrics	6	4.7				
Intensive Care	43	33.3				
Education	7	5.4				
Women's Health	3	2.3				
Family	15	11.6				
Emergency/Trauma	4	3.1				
Other	9	7.2				

<sup>a</sup> Totals do not equal 100% because it was possible to give more than one answer.

Table 3.3. Employment Characteristics of Sample

Variable	<u>n</u>	Percent	<u>M</u>	<u>SD</u>	Min.	Max.
Years Employed Current Organization (n=128)			7.86	5.79	<1	24
Years Employed Present Type Nursing (n=128)			8.08	6.28	1	32
Current Employment (n=129)						
Full-time (36 hr./wk. or >)	123	95.3				
Part-time (<36 hr./wk.)	6	4.7				
Employment Setting (n=127)						
Acute Care Hospital	89	70.1				
Clinic	18	14.2				
School of Nursing	2	1.6				
Physician's Office	3	2.4				
Home Health Agency	1	.8				
Private Practice	2	1.6				
Co., State, or Fed. Government	7	5.5				
Rural or Rural Clinic	5	3.9				

Note. Co. = County, Fed. = Federal

Table 3.4. Preceptor Characteristics of Sample

Variable	n	Percent	M	SD	Min.	Max.
Type of Students Usually Precepted <sup>a</sup> (n=129)						
Undergraduate Students	65	50.4				
New Nurse Employees	80	62.0				
Graduate Students	32	24.8				
Nurse Practitioner Students	25	19.4				
Nurses Cross-training	41	31.8				
Other	10	7.8				
Formal Preparation or Training for Preceptor Role (n=128)						
No	95	74.2				
Yes	33	25.8				
If yes, Approximate Hours of Preparation or Training (n=127)			6.25	18.26	1	100
Months Experience as Preceptor (n=116)			56.48	65.52	2	288
Approximate Total Number of Individuals Precepted During Career (n=124)			31.31	52.95	1	400
Greatest Number of Students Precepted at One time (n=126)			2.27	1.72	1	12
Overall Preceptor Satisfaction [0-100] (n=129)			75.67	17.46	17	100
Overall Preceptor Perception of Qualification for Role [0-100] (n=128)			77.44	15.54	25	100

<sup>a</sup> Totals do not equal 100% because it was possible to give more than one answer.

### Data Collection

The method of data collection was a self-reporting questionnaire distributed following institutional review board (IRB) approval (Appendix A). The researcher obtained permission from a large healthcare system (Appendix B) to conduct the study among RN nurse preceptors at two hospitals within the system, provided their own nursing personnel distributed the questionnaire to their preceptors. After IRB approval, the health sciences center school of nursing released names and employment addresses of RN nurse preceptors throughout Texas. The researcher used all preceptor names from 1998 to create a mailing list for the study.

The researcher prepared a total of 376 research packets for distribution to potential participants. The research packet contained a cover letter describing the study (Appendix C), a Nurse Preceptor Questionnaire (Appendix D), and a stamped, addressed envelope in which to return the questionnaire to the researcher. The 36-item Nurse Preceptor Questionnaire contained demographic, nurse-specific, and preceptor-specific study variables (Part I), and the Clance IP Scale (Part II) (Clance, 1985). The cover letter explained that voluntary completion and return of the questionnaire implied consent. No financial incentives for completing the questionnaire were offered; however, the researcher placed a custom designed, laminated bookmark into each research packet as a token of appreciation.

On January 4, 1999, the researcher personally delivered 260 research packets to the nursing service office of the large healthcare system for individual dissemination to 25 nurse managers. Cover letters to the managers requested they follow explicit guidelines in distributing the materials. Only the unit nurse managers knew the names of RN preceptors who received research packets at the two hospitals. The nurse managers did not see completed questionnaires because participants mailed their responses directly back to the researcher. Likewise, only the researcher had access to the preceptor mailing list derived



from the school of nursing database. The researcher mailed 116 packets to the RN preceptors listed on the mailing list, which was destroyed upon completion of data analysis. Thus, a total of 376 research packets were available for the target population. However, as a result of the specific inclusion criteria, the nurse managers at the two hospitals distributed only 151 packets. Of 116 mailed packets, five returned to the sender through the mail as undeliverable. Thus, 263 RN preceptors actually received the questionnaire. Because the researcher did not know names of participants receiving research materials from unit nurse managers, it was not possible to control for the possibility that some preceptors employed by the health care system may have received a second questionnaire through the mail.

Exactly two weeks following the receipt of the first returned questionnaire, sufficient reminder postcards were taken to the nurse managers to give to the participants who had not returned their questionnaires. Forty-five reminder postcards were sent through the mail. The researcher received 108 questionnaires back (41%) before the reminder postcards could have reached participants. One hundred thirty returned questionnaires were eventually received prior to data analysis, resulting in an overall return rate of 49%. For this study, a postcard reminder strategy, as suggested by Miller (1991), resulted in an increase in the percentage of questionnaires returned.

A marked difference existed in the return rates between the participants receiving questionnaires at work through the mail compared to those receiving their packets at work directly from their nurse managers. Sixty-four percent of the RN preceptors receiving mailed packets returned their questionnaires whereas only 38% of the RNs receiving packets distributed by the nurse managers decided to participate. Receiving the opportunity to participate in nursing research through the mail may result in participants receiving the request at a more convenient time. A questionnaire mailed by name may also add a greater sense of credibility and importance to the research.

### Instrumentation

This section describes instruments that researchers use to measure the IP. The rationale for the selection of the tool used for the current study is explained.

#### Impostor Phenomenon Scales

Two scales have been developed to measure impostor feelings: the Harvey Impostor Phenomenon Scale (Harvey, 1981) and the Clance Impostor Phenomenon Scale (Clance, 1985). Although Clance and Imes (1978) first described the phenomenon, Harvey (1981) developed and validated the first tool, the Harvey Impostor Phenomenon Scale (HIPS). The HIPS is self-administered, has 14 items, and has a seven-point Likert rating scale. Respondents rate each of the 14 statements on the seven-point scale which ranges from number one, not at all true, to number seven, very true. Harvey did not assign word descriptions to the intermediate scale numbers. Points are assigned to each possible response; total scores on the instrument can range from 7 to 84. The higher the total score, the stronger the subjective feelings of impostorism, and thus, the stronger the presence of the IP.

The Clance IP Scale was published by Clance (1985) and by Clance and O'Toole (1988). The Clance IP Scale is a 20-item instrument using a five-point Likert scale, ranging from number one, not at all true, to number five, very true. An answer of two represents rarely true, number three represents sometimes true, and number four means often true. Points from each statement are added to obtain a total score. According to Clance (1985), a score of 40 or less shows that respondents reported few impostor characteristics. A score between 41 and 60 indicates moderate IP experiences, between 61 and 80 shows frequent IP feelings, and a score greater than 80 indicates intense IP experiences. Subsequently, Clance and O'Toole (1988) suggested a cutoff score of 60 or above for moderate to intense IP feelings measured by the Clance IP Scale.

Holmes et al. (1993) suggested a cutoff of 62 be used to separate impostors from non-impostors, a score that minimized false positives and false negatives in their study.

Validity and reliability. In deciding whether the HIPS or Clance IP Scale was best for the current study, a comparison of validity and reliability was conducted. Construct validity for the impostor phenomenon has been shown through discriminant analysis (Burns & Grove, 1997) using both the HIPS and the Clance IP Scale. Harvey (1981) compared measures of the phenomenon to measures of self-esteem and self-monitoring in honors students and found that a significant relationship did not exist between the IP and self-monitoring. Furthermore, a low negative relationship ( $r = -.28$ ) existed between the HIPS and a scale to measure self-esteem (Harvey, 1981). Chrisman, Pieper, Clance, Holland, and Glickauf-Hughes (1995) demonstrated, using the Clance IP Scale, that the impostor phenomenon is substantially different from the constructs of depression, self-esteem, self-monitoring, and social anxiety.

Factor analysis (Burns & Grove, 1997) has also demonstrated construct validity for the impostor phenomenon. Kertay, Clance, and Holland (cited in Chrisman et al., 1995) identified three primary factors (fake, discount, and luck) using the Clance IP Scale. In their unpublished factor study, Kertay and colleagues found that fake accounted for 45.2% of the variance in the Clance Scale with discount and luck accounting for 6.1% and 6.6%, respectively. Similarly, using principal components analysis in their study, Chrisman et al. found the factor fake accounted for 38.5% of the variance in the Clance Scale with discount and luck accounting for 9.2% and 7.2%, respectively. Chrisman et al. concluded that such consistency supports a stable factor structure, substantiating the construct validity of the Clance IP Scale.

Although Harvey (1981) demonstrated acceptable levels of validity and reliability (Cronbach's  $\alpha = .85$ ) (Nunnally, 1978) in her original work with the HIPS, some researchers have questioned the HIPS's internal consistency

(Chrisman et al., 1995; Edwards, Zeichner, Lawler, & Kowalski, 1987). Edwards and fellow researchers performed a factor analysis on the HIPS, isolating three factors (impostor factor, unworthy factor, and inadequate factor). Each of these factors achieved a Cronbach's alpha of .65 or greater. However, Edwards et al. obtained an alpha of .34 on the full HIPS, "well below the desired level..." (p. 258). Furthermore, some speculation has occurred that the wording of the HIPS may be perceived as negative by respondents and thus, may interfere with accurate self-reporting (Chrisman et al., 1995).

The Clance IP Scale was designed to tap feelings not addressed by the HIPS, such as fear of evaluation and feeling less capable than peers (Holmes et al., 1993) and fear of not being able to repeat success (Chrisman et al., 1995). Wording on Clance's Scale is intended to encourage a feeling of safety and acceptance in the respondent (Holmes et al.). Internal consistency for the Clance IP Scale has been demonstrated. Reported reliability coefficients (Cronbach's alpha) ranged from .85 (Cozzarelli & Major, 1990) and .92 (Chrisman et al., 1995), to .96 (Holmes et al., 1993). Nunnally (1978) indicated that a Cronbach's alpha of .80 is sufficient for an established test. In the current study, the alpha coefficient equaled .90.

Holmes et al. (1993) compared the ability of the HIPS and Clance IP Scale to distinguish between independently identified impostors and non-impostors in clinical and non-clinical samples ( $n=62$ ). The researchers administered both scales to the four different groups within their sample: clinically identified impostors; clinically identified non-impostors; non-clinical impostors; and non-clinical non-impostors. Holmes and associates found that scores on the two scales for all subjects significantly correlated ( $r = .89$ ,  $p < .001$ ). Data analysis indicated high internal consistency for each scale ( $\alpha = .91$  on the HIPS,  $\alpha = .96$  on Clance's Scale). By establishing a cutoff score of 62 for each scale, the number of false positive and false negative impostors was minimized using either scale. However, Holmes et al. concluded the Clance IP Scale was the more

sensitive instrument because no false negatives occurred with the Clance IP Scale compared to five false negatives with the HIPS.

In summary, the 20-item Clance IP Scale appeared to have more consistent reliability compared to the 14-item HIPS and has been considered the more sensitive instrument. In addition, the Clance Scale was designed with some of the potential shortcomings of the HIPS in mind. For these reasons, the researcher chose the Clance IP Scale for the study.

#### Nurse Preceptor Questionnaire, Part I

This part of the questionnaire (Appendix D) was a researcher-designed survey tool containing 16 items corresponding to demographic, nurse-specific and preceptor-specific variables. These items were designed to gather information related to their preceptorship experiences such as initial nursing education, length of experience as nurse and preceptor, and feelings about their role. Data obtained in Part I were primarily nominal and ratio level data.

#### Nurse Preceptor Questionnaire, Part II

Dr. Pauline Rose Clance authorized the use of the Clance IP Scale for this study (Appendix E). The Clance Scale was copied verbatim for Part II of the Nurse Preceptor Questionnaire (Appendix D) and placed into table format. Seven RNs, not members of the sample, completed Parts I and II of the Nurse Preceptor Questionnaire (Appendix D) as a pilot study. Based on this feedback, the researcher altered item numbers 7 and 13 in Part I and made minor editing changes. The pilot study helped the researcher determine that the questionnaire had baseline validity in that it reflected constructs important to nurse preceptors as well as reliably elicited consistent answers from nurses. However, when the IP scoring guide was repeated in Part II at question 7 for ease of the respondent working on the third page of the questionnaire, question 16 was inadvertently omitted, and IP question number 15 appeared twice. The decision was made to

analyze the IP scale as a 19-item tool; thus, answers for IP question number 16 were not available. Question 16 would have read, "If I receive a great deal of praise and recognition for something I've accomplished, I tend to discount the importance of what I have done."

The questionnaire and the cover letter did not contain the term "impostor." The researcher substituted the concepts of "feelings and experiences" based on the belief that negative reactions to the term "impostor" could impact the data collection unless the instrument appeared to be neutral in tone and non-threatening (Engberg, 1996; Hollingsworth, 1995).

#### Protection of Human Subjects

The researcher ensured the protection of human subjects in a number of ways. First, approval to conduct the study under exempt status was received from the health sciences center IRB (Appendix A). An exempt research study refers to proposed research that review boards consider unnecessary to fully review because little risk is posed to human subjects. The researcher also obtained approval from appropriate hospital administrative personnel to conduct the study among RN nurse preceptors employed by the large healthcare system (Appendix B).

Secondly, the participants' cover letter (Appendix C), enclosed with the Nurse Preceptor Questionnaire (Appendix D), explained that participation in the study was totally voluntary, anonymous, and confidential. For the majority of participants, only their own nurse managers knew who had received the opportunity to participate. Finally, no psychological risk was anticipated for participants based on the short-term nature of the self-reporting questionnaire and the degree of anonymity provided.

### Data Analysis

Prior to data analysis, the researcher hand measured, with a 100cm ruler, each response to the two visual analog-style questions using a continuum format regarding preceptor satisfaction and qualification for the role. The researcher recorded this value near the response for subsequent data entry. Participants provided multiple responses for questions three, nine, and eleven so during data entry each category in these three questions was entered as yes or no. New categories were created based on responses written in by participants under "other."

The researcher carried out the data analysis using the SPSS statistical software package (SPSS, 1997). The remainder of this section discusses the statistical analyses used for each research question in the same order the questions were delineated in Chapter I.

#### Question 1: What is the incidence of the impostor phenomenon among nurse preceptors?

The individual item scores on the Nurse Preceptor Questionnaire (Clance IP Scale) were summed for a total score. Had the IP scale contained all 20 items, the cutoff score of 62 (out of 100 possible points) would have been used to separate nurse preceptor impostors from non-impostors (Holmes et al., 1993). However, because of the missing question, the RN preceptors in this sample could have only scored a maximum of 95 points with the 19-item tool. Therefore, the cutoff for this study was lowered by five points to 57. Participants scoring above 57 fit the definition of impostors, individuals moderately or intensely affected by impostor feelings.

Seven participants omitted a total of eight answers on the IP portion of the questionnaire. In order to investigate the effect these missing values had upon the overall results, series means were substituted for the missing scores (Cohen & Cohen, 1983). If a participant omitted a question on the IP scale, the

SPSS software substituted that participant's mean IP score for the missing value. This procedure had no effect whatsoever upon the percentage of participants falling into the impostor and non-impostor groups. However, the alpha coefficient for the study did drop slightly from .9035 to .9020. Given this difference, no further analyses were conducted with the data derived using the substitute means technique.

Additionally, a new grouping variable was developed having two groups: impostors and non-impostors. The new grouping variable was crosstabulated with the demographic, nurse-specific and preceptor-specific variables to see what percentages of impostors and non-impostors fell into the different categories.

Lastly, the researcher employed a median-split procedure (Cozzarelli & Major, 1990; Holmes et al., 1993; Smith-Clark, 1988) in which the sample median IP score was used to divide the sample into high impostor and low impostor groups. The literature review revealed that, in the majority of the studies reviewed, researchers used this procedure as a dividing method to separate individuals with greater tendencies toward impostor feelings from those with lesser tendencies toward impostor feelings. The percentages obtained using this method of dividing the sample were compared to the percentages obtained using the groupings formed with the specific cutoff score of 57.

Question 2: Is there a relationship between the intensity of impostor feelings and demographic, nurse-specific, or preceptor-specific study variables?

Descriptive statistical analysis on the sample included computations for frequency, range, and measures of central tendency (mean and standard deviation) where the data were interval or ratio level. The nominal level data corresponding to nurse-and preceptor-specific variables were dummy coded first in order to run Spearman rho correlations on the data. According to Cohen and Cohen (1983), dummy coding each individual item in a category into a



dichotomous variable allows the new variable to be utilized similar to ratio level data. This provides researchers an approach to obtain means, standard deviations, and Spearman rho correlations on categorical data.

Pearson's product-moment correlation coefficients were then calculated to determine relationships between the IP and the ratio level variables in Part I of the questionnaire. Pearson's  $r$  is one parametric test among inferential statistical techniques (Burns & Grove, 1997) that permit researchers to develop an understanding of factors associated with other variables. Spearman rho, an adaptation of the Pearson product-moment correlation, is a nonparametric test useful in finding correlations when the assumptions of Pearson's  $r$  cannot be met such as the case with ordinal level data (Burns & Grove). Thus, Spearman rho correlation coefficients were calculated to uncover relationships between the IP and the nominal level data that had been dummy coded as well as relationships among nominal level variables.

Question 3: What differences exist among study variables between nurse preceptors identified as impostors and nurse preceptors identified as non-impostors?

Data from the impostor group and the non-impostor group were compared to each ratio level variable using the t-test for independent samples (Burns & Grove, 1997). Prior to the t-test, Levene's Test for Equality of Variances was used to test the assumption that the two groups came from sample populations with equal variance. Levene's Test evaluates homogeneity of variance, which is particularly useful with analysis of variance because it is less dependent on the assumption of normality than most tests (Norusis, 1990). Levene's Test showed no significant F values, indicating that all the ratio level variables had equal variance. This fact indicated that the assumptions for the parametric t-test for independent samples were met. Thus, differences in ratio-level demographic, nurse-specific, and preceptor-specific variables for nurse

preceptors in the IP group were evaluated in comparison to the same variables in nurse preceptors from the non-impostor group.

A chi-square statistic was also calculated to determine non-parametric differences between the cells. Burns and Grove (1997) indicated that chi-square is distribution-free (i.e., non-parametric) and is designed to test for differences in frequencies that could be expected to occur if the data categories were independent of each other. Only those chi-square results with cells where  $n \geq 5$  were used in reporting and discussing this statistic.

### Summary

A descriptive correlational study was conducted to determine the incidence of impostor feelings among nurses identified as nurse preceptors and to explore relationships among sample participants between the IP and numerous other variables. Self-reporting questionnaires, containing 19 of the 20 items on the Clance IP scale (Clance, 1985) and 16 demographic, nursing-specific, and preceptor-specific variables were distributed to 263 RNs identified as preceptors by their health care entities or by the health sciences center school of nursing. Descriptive data analysis techniques using responses from 129 returned questionnaires provided information about the sample participants. In Chapter IV, the results from inferential statistical procedures are reported to describe the incidence of IP among the sample.

## CHAPTER IV

### RESULTS, ANALYSIS, AND INTERPRETATION OF DATA

#### Introduction

A descriptive, correlational study was conducted to determine the incidence of impostor feelings among RNs identified as nurse preceptors and to examine relationships between the IP and several other variables concerning nurses and their preceptor role. Study participants ( $N=130$ ) completed a 35-item, self-reporting questionnaire that included the Clance IP Scale (Clance, 1985) to measure impostor feelings. The three research questions provide a framework for the report and interpretation of research findings. Strength of linear relationships (i.e., correlations) is considered weak if under .3, moderate if .3 to .5, and strong if over .5 (Cohen, 1988).

#### Research Questions and Results

For variables subjected to the non-parametric and parametric correlations discussed in Chapter III, values for  $n$  ranged from 112 to 129. Several returned questionnaires contained missing responses pertaining to the study variables. Because the final sample size ( $N=129$ ) was greater than 85, the number considered adequate by power analysis, the omitted data were entered as missing.

#### Question 1: What is the incidence of the impostor phenomenon among nurse preceptors?

With 95 possible points on the Clance IP Scale as administered, the average participant's score ( $M= 44.43$ ,  $SD= 10.52$ ) fell below the midpoint (47.5) of total possible points (Table 4.1). Another measure of central tendency, median, is also shown. In addition, the near normal curve in Figure 4.1 illustrates

Table 4.1. Impostor Phenomenon among Total Sample

	Mean	SD	Median	Min	Max
Total IP Scale Score (N=129)	44.43	10.52	45.00	22	75

Note. Based on 19-item Clance IP Scale, 19-95 possible.

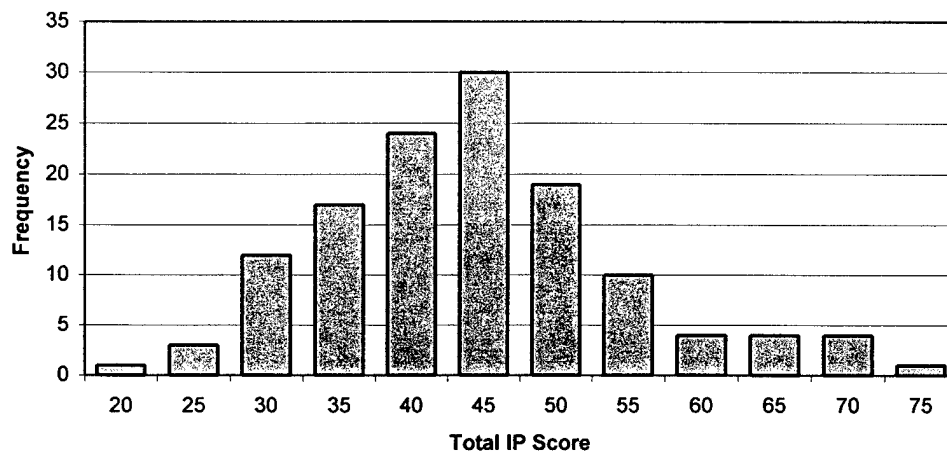


Figure 4.1. Histogram of Impostor Phenomenon among Total Sample (N=129).

that the IP has an almost theoretically normal distribution (Burns & Grove, 1997) among the RN preceptors who participated in this study.

Data analysis also revealed that, for two different IP questions, the statistical mode equaled four. The mode corresponds to the answer that participants give most frequently. In this study, for IP question 1, "I have often succeeded on a test or task even though I was afraid that I would not do well before I undertook the task," participants ( $n=75$ , 58.1%) answered most often with response choice four, "often true." Participants ( $n=48$ , 37.2%) also answered most frequently with "often true" in response to IP question 19, "If I'm going to receive a promotion or gain recognition of some kind, I hesitate to tell others until it is an accomplished fact."

Approximately ten percent ( $n=13$ ) of the RN preceptors in the sample fit the definition of impostor if a specific cutoff score is used to divide impostors from non-impostors (Figure 4.2). However, with most of the IP research studies reviewed, a median-split procedure was used to separate subjects having greater or lesser tendencies toward impostorism (Holmes et al., 1993). In the current study, using the sample median score of 45, the median-split procedure results in a remarkably different pattern of impostorism. Fifty-six (43.4%) participants had high-impostor tendencies, roughly equal to the number of participants with low-impostor tendencies ( $n=73$ , 56.6%) (Figure 4.3).

Crosstabulation of the frequencies in each IP category using these two different dividing methods revealed that the median-split procedure resulted in the inaccurate placement of 43 RN preceptors into the impostor group (Table 4.2). In other words, assuming that the cutoff of 57 for this study effectively separates impostors from non-impostors, 43 (37.1%) "false positives" occurred as non-impostors were placed into the high-impostor category. Holmes et al. (1993) found 5 false positives in their sample of 62, which included 26 clinically and non-clinically identified impostors. Even though only 13.9% of the non-

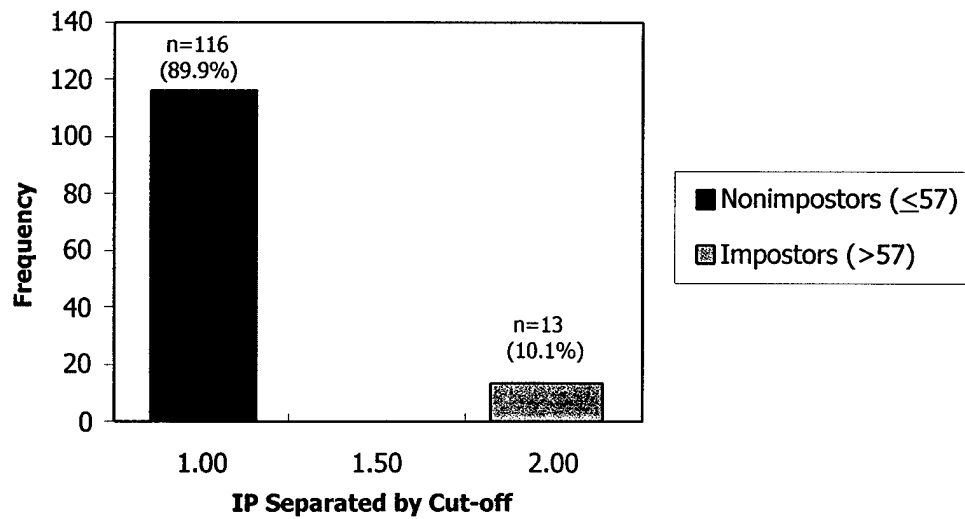


Figure 4.2. Incidence of Impostor Phenomenon Resulting from Specific Cutoff Score of 57 on 19-item Clance IP Scale, 19-95 possible (N=129).

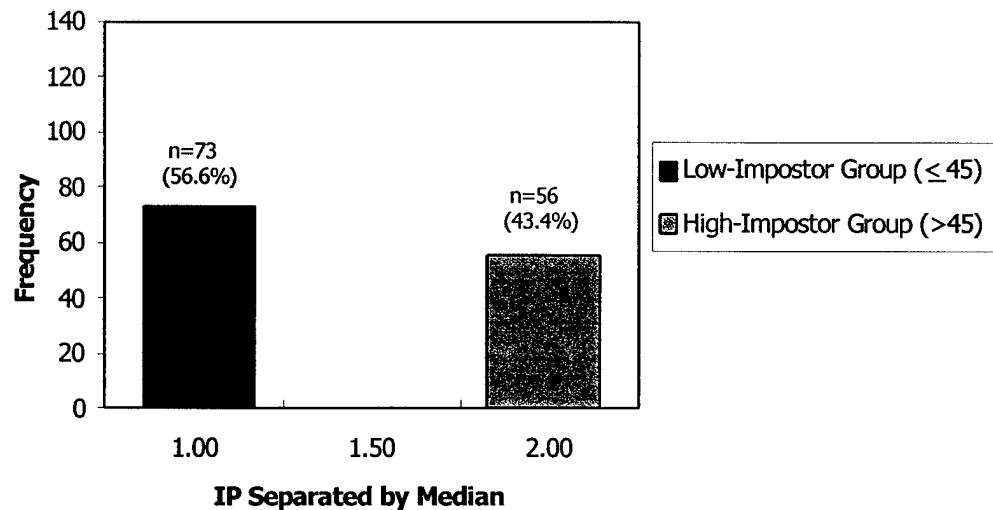


Figure 4.3. Incidence of Impostor Phenomenon Resulting from Sample Median-split Procedure on 19-item Clance IP Scale, 19-95 possible (N=129).

Table 4.2. Comparison of Two Ways to Divide Sample

		IP Separated by Median		
IP Separated By Specific Cutoff Score		Low Impostor	High Impostor	Total
	Non-impostor	73 (62.9%)	43 (37.1%)	116 (89.9%)
	Impostor		13 (100%)	13 (10.1%)
	Total	73 (56.6%)	56 (43.4%)	129 (100%)

impostors in the Holmes' study were "false positives," the finding from the current study supports their view that utilizing a cutoff score may decrease the incidence of false positives and false negatives, thereby increasing the sensitivity and utility of IP measurement tools.

Gender and nurse-specific variables were identified for RN preceptors (Table 4.3) categorized as non-impostors or impostors. The percentages of males falling into the non-impostor group (91.3%) and impostor group (8.7%) were approximately equivalent to the nonimpostor (89.6%) and impostor (10.4%) grouping for females.

Similarly, whether the RNs in the current study practiced in an acute care hospital or clinic, the percentage affected by the IP was nearly identical. Those with advanced practice degrees and nurse practitioner certificates reported a higher rate of impostorism ( $n=2$ ; 25%) compared to nurses with other types of education ( $n=2$ ; 7.7% to  $n=6$ ; 15%). Likewise, nurses with maternal/newborn roles reported a somewhat greater rate of the IP ( $n=4$ ; 22.2%) than did nurses in other roles ( $n=1$ ; 6.7% to  $n=3$ ; 17.6%). These percentages may only appear to be different because, the small numbers of nurses represented in many of these categories meant that chi square analysis to determine if true differences existed was not possible.

Preceptor-specific descriptive data for sample participants fitting the impostor category indicated that four received formal preceptor training compared to nine who did not (Table 4.4). At face value, such a situation might suggest that lack of role preparation might be associated with impostorism. However, the percentage of those fitting the impostor category receiving preceptor training ( $n=4$ ; 12.1%) was greater than those who did not receive training ( $n=9$ ; 9.5%). Again, due to small categories, it was impossible to determine if this difference was statistically significant. The types of preceptees with whom the participants usually worked were almost equally distributed; thus,



Table 4.3. Gender and Positive Responses to Nurse-Specific Variables by IP Resulting from Specific Cutoff Score (N=129)

	<u>Non-impostors</u> n (%)	<u>Impostors</u> n (%)
Gender		
Male	21 (91.3)	2 (8.7)
Female	95 (89.6)	11 (10.4)
Nursing Education <sup>a</sup>		
ADN	20 (90.9)	2 (9.1)
Diploma	34 (85.0)	6 (15.0)
BSN	49 (89.1)	6 (10.9)
MSN	24 (92.3)	2 (7.7)
Doctorate	2 (100)	--
Advanced Practice	3 (75.0)	1 (25.0)
NP (not Adv. Prac.)	3 (75.0)	1 (25.0)
Non-nursing Degrees	5 (100)	--
Primary Nursing Role <sup>a</sup>		
Adult	43 (91.5)	4 (8.5)
Maternal/Newborn	14 (77.8)	4 (22.2)
Pediatrics	14 (82.4)	3 (17.6)
Geriatrics	5 (83.3)	1 (16.7)
Intensive Care	40 (93.0)	3 (7.0)
Education	6 (85.7)	1 (14.3)
Women's Health	3 (100)	--
Family	14 (93.3)	1 (6.7)
Emergency/Trauma	4 (100)	--
Current Employment		
Full time	110 (89.4)	13 (10.6)
Employment Setting (n=127)		
Acute Care Hospital	79 (88.8)	10 (11.2)
Clinic	16 (88.9)	2 (11.1)
All other answers	20 (100)	--

Note. Dashes indicate no response in a particular sub-category.

<sup>a</sup> More than one answer possible.

Table 4.4. Preceptor-Specific Variables by  
IP Resulting from Specific Cutoff Score

	<u>Non-impostors</u> n (%)	<u>Impostors</u> n (%)
Formal Preceptor Preparation (n=128)		
Yes	29 (87.9)	4 (12.1)
No	86 (90.5)	9 (9.5)
Type Student Usually Trained <sup>a</sup> (n=129)		
Undergraduate	58 (89.2)	7 (10.8)
New Nurse Employees	73 (91.3)	7 (8.8)
Graduate	28 (87.5)	4 (12.5)
Nurse Practitioner	23 (92.0)	2 (8.0)
Nurses Cross-training	37 (90.2)	4 (9.8)

<sup>a</sup> More than one answer possible.

this finding suggested with whom the preceptors work probably has no bearing on the presence of impostorism.

Question 2: Is there a relationship between the intensity of impostor feelings and demographic, nurse-specific, or preceptor-specific study variables?

Non-parametric correlations. Spearman rho values show the relationships between the nominal level study variables and total IP score (Table 4.5). Spearman rho correlations are also reported for significant relationships found among nominal level variables.

Employment at an acute care hospital was significantly associated with total IP score. However, the relationship ( $r = .178$ ,  $p = .044$ ) between the IP and working in a hospital was weak. No other nominal level variable significantly correlated with the IP.

Preceptors working with undergraduate nursing students were somewhat less likely to have graduated from diploma programs ( $r = -.206$ ,  $p = .019$ ) or have non-nursing bachelor's or master's degrees ( $r = -.202$ ,  $p = .021$ ). Preceptors with BSN degrees were more often paired with undergraduate students ( $r = .291$ ,  $p = .001$ ). Master's prepared nurses ( $r = -.344$ ,  $p < .001$ ) and those with roles in family practice ( $r = -.414$ ,  $p < .001$ ) and geriatrics ( $r = -.206$ ,  $p = .019$ ) (i.e., advanced practice nurse practitioners) were significantly less likely to be a preceptor for new employees. Yet, RNs working in the hospital setting were teamed with new employees ( $r = .546$ ,  $p < .001$ ). Strong correlations greater than  $+ .7$  ( $p < .001$ ) indicated that master's prepared RNs and those with primary nursing roles focused on families were significantly more likely to work with nurse practitioner students. These findings were supported by an equally strong negative correlation between preceptor employment in a hospital and working with nurse practitioner students ( $r = -.731$ ,  $p < .001$ ).

Table 4.5. Significant Non-Parametric Correlations – Spearman Rho

	Edu Diploma	Edu BSN	Edu MSN	Edu Doctor	Other Degree	Years RN Exp	Years Current Org	Acute Care Hospital	Geriatrics Role	Edu Role	Family Role	Train Under- grads	Months Precept Exp
Train Undergrad Students	-.206*	.291**			-.202*				.219*				.249**
Orient New Employees	.179*		-.344**					.546**	-.206*		-.414**		
Train Graduate Students					.257**								
Train NP Students	-.244**		.702**					-.731**			.740**		
Orient Cross-training Nurses			-.208*					.314**					
Total IP Score								.178*					
Worked at Clinic							-.227*						
Adult Nursing Role							-.448**						

Table 4.5. (continued). Significant Non-Parametric Correlations – Spearman Rho.

	Edu Diploma	Edu BSN	Edu MSN	Edu Doctor	Other Degree	Years RN Exp	Years Current Org	Acute Care Hospital	Geriatrics Role	Edu Role	Family Role	Train Under- grads	Months Precept Exp
Intensive Care Role							-.210*						
Pediatrics Role				.322**					.240**				
Formal Preceptor Preparation										.251**			.307**
Hrs Preceptor Preparation										.244**			
Total Number Trained	-.301**											.390**	
Trained at One Time	-.230**	.308**								.193*		.347**	

Note. \*  $p \leq .05$ . \*\*  $p \leq .001$ . Doctor = Doctorate, Edu = Education, Exp = Experience, Org = Organization, Precept = Preceptor.

Preceptor employment in the clinic setting was negatively associated with the length of employment at the current organization ( $r = -.227$ ,  $p = .01$ ), indicating that the longer nurses worked for their current employer, the less likely they were to be employed at a clinic (Table 4.5). Years of RN experience were negatively related to providing nursing care to adults and working in intensive care ( $r = -.448$ ,  $p < .001$  and  $r = -.210$ ,  $p = .017$ , respectively).

Serendipitous findings included a moderate positive relationship between having a doctorate in nursing and a pediatrics primary role ( $r = .322$ ,  $p < .001$ ). A positive connection ( $r = .240$ ,  $p = .006$ ) was noted between the functional roles of pediatrics and geriatrics.

No primary nursing roles, other than education, were associated with having received formal preceptor preparation or with the number of hours of such preparation. Positive correlations were found between education as primary role and preceptor role preparation ( $r = .251$ ,  $p = .004$ ) and between education role and hours of preparation ( $r = .244$ ,  $p = .006$ ). Likewise, only the education role was weakly associated with the number of preceptees taught at the same time ( $r = .193$ ,  $p = .03$ ).

The total, cumulative number of preceptees was positively linked to training undergraduate nursing students ( $r = .390$ ,  $p < .001$ ) and negatively linked to diploma nursing education ( $r = -.301$ ,  $p = .001$ ). In addition, the number of preceptees taught at the same time correlated positively to BSN education ( $r = .308$ ,  $p < .001$ ) and training undergraduate students ( $r = .347$ ,  $p < .001$ ).

Parametric correlations. Pearson product-moment correlation coefficients demonstrated significant relationships between several ratio level variables (Table 4.6).

Only one variable correlated with participants' IP scores: self-perceived qualification for the preceptor role ( $r = -.285$ ,  $p = .001$ ). This negative coefficient

Table 4.6. Pearson-r Correlation between Sample Variables

	Age	Years RN Experience	Years Current Org	Years Present Type Nsg	Months Preceptor Experience	Hours Preceptor Preparation	Trained at One Time	Total IP Score	Preceptor Satisfaction
Years Present Type Nsg	.446**	.551**	.465**						
Mos. Preceptor Experience	.379**		.212*	.443**					
Hrs. Preceptor Preparation					.423**				
Total Number Trained				.350**					
Trained at One Time					.409**	.301**			
Preceptor Satisfaction			-.202*			.178*	.220*		
Preceptor Qualification				.197*	.242**	.231**	.201*	-.285**	.516**

Note. \* $p \leq .05$ . \*\* $p \leq .001$ . Mos = Months, Nsg = Nursing, Org = Organization.

indicates that the greater the total score on the IP scale, the less qualified to enact the preceptor role these participants felt.

Participants' length of preceptor experience (months) was moderately associated with preceptors' ages ( $r = .379$ ,  $p < .001$ ) and time in present type of nursing ( $r = .446$ ,  $p < .001$ ). Length of employment in the current organization weakly correlated with length of preceptor experience ( $r = .212$ ,  $p = .023$ ).

A moderately positive relationship was discovered between the number of preceptees at one time and length of preceptor experience ( $r = .409$ ,  $p < .001$ ), as well as between numbers of preceptees at one time and hours of preceptor preparation ( $r = .301$ ,  $p = .001$ ). Preceptor satisfaction correlated strongly with feeling qualified for the preceptor role ( $r = .516$ ,  $p < .001$ ). This result suggests the need for enhancing preceptor role competency.

Question 3: What differences exist among study variables between nurse preceptors identified as impostors and nurse preceptors identified as non-impostors?

The t-test for independent samples was performed between ratio level study variables and the groupings obtained using the IP cutoff score of 57. The t-test resulted in only one significant difference between nurse preceptors identified as impostors and those identified as non-impostors (Table 4.7). Impostors were significantly different from non-impostors [ $t(126) = 2.552$ ,  $p = .012$ ] in terms of their perceptions of overall qualification to function in the preceptor role. The mean score on the 0-100 continuum for preceptors classified as impostors was 67.23, over eleven points lower than the mean qualification score for preceptors classified as non-impostors. Thus, as a group, those fitting the definition of impostors reported feeling less qualified overall as preceptors than did those considered non-impostors. Because nurses who fit in the impostor category make up only about 10% of this sample, as a group, they reported feeling qualified for their preceptor role.



Table 4.7. Significant Difference in Perceived Qualification for Preceptor Role

IP Grouped by Cutoff		<u>n</u>	Mean	Std. Deviation
Overall Preceptor Qualification	Non-impostor	115	78.59	15.01
	Impostor	13	67.23	17.02

$t(126) = 2.552, p = .012.$

The chi-square test of independence was done between nominal level variables and the impostor/non-impostor groups. Only four bivariates had at least 5 in a cell. These four chi-square tests involved: diploma education [ $\chi^2 (1, n=129) = 1.550, p = .221$ ]; BSN education [ $\chi^2 (1, n=129) = .073, p = .777$ ]; training undergraduate students [ $\chi^2 (1, n=129) = .069, p = 1.000$ ]; and orienting new employees [ $\chi^2 (1, n=129) = .410, p = .557$ ]. None of these chi-square values were statistically significant; therefore, participants labeled impostors and non-impostors in this study cannot be considered different with respect to these four variables.

### Interpretation of Findings

#### Research Question 1

The IP does exist among this sample of RN preceptors; however, the percentage of participants who reported they were affected by the phenomenon is small.

#### Research Question 2

Feelings reported by RN preceptors employed at acute care hospitals suggest that such an employment setting slightly increased the risk of feelings associated with the IP. And, the greater the intensity of impostor feelings reported by the participants, the less qualified they felt for their preceptor role. While this latter finding is not unexpected, it is consistent with the concept that impostors lack self-confidence regarding their ability for work related tasks.

#### Research Question 3

The only significant difference between preceptors identified as impostors and those identified as non-impostors was in the level of their self-perceived qualifiability for enacting the preceptor role. Again, this finding supports the construct validity of the phenomenon in that preceptors who reported greater

impostor feelings are alike in most ways to their colleagues who reported fewer impostor tendencies, yet those identified as impostors reported feeling less competent to fulfill this role than did their peers.

### Summary

One hundred thirty RN preceptors practicing throughout the state of Texas completed a self-reporting questionnaire to determine the incidence of the IP among this population and to uncover other variables that may be associated with the IP among this group. Data were obtained that included demographic, nurse-specific, and preceptor-specific variables as well as participants' level of impostor feelings using the Clance IP Scale. The researcher employed descriptive statistical techniques and inferential statistical analyses, including Spearman rho, Pearson-r, and the t-test for independent samples, to investigate the sample constitution and measure the percentage of the sample affected by impostor feelings. Results indicated that about 10% of the participants experienced moderate to intense levels of the IP. Another finding showed that the greater the participants' feelings of impostorism, the less qualified they felt enacting their preceptor role. Employment at an acute care hospital was a significant factor associated with the IP among RN preceptors. One significant difference was also noted between RN preceptors identified as impostors and those identified as non-impostors in that impostors were significantly more likely to feel less qualified for their preceptor role than non-impostors.

## CHAPTER V

### DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

#### Introduction

Chapter V discusses findings from the current study and compares and contrasts them with previous IP research. Conclusions based on the overall findings are drawn. Such conclusions include exploring the utility of Pender's 1996 Health Promotion Model (HPM) as a conceptual framework. Limitations affecting the generalizability of the study as well as implications for nursing practice are considered. Lastly, the researcher offers recommendations for future research.

#### Discussion of Findings

##### Question 1: What is the incidence of the impostor phenomenon among nurse preceptors?

Because this study was one of the first to utilize a specific cutoff score to categorize participants into nonimpostor and impostor groups, it is difficult to compare the size of the resulting groups with findings from the literature. In the current study, only a small percentage ( $n=13$ , 10.1%) of participants responding to the Clance IP Scale reported experiencing impostor feelings consistent with a moderate to intense level of the phenomenon.

Despite compelling reasons for increased risk of impostorism among various nursing populations, other IP studies have found that high levels of the IP did not exist among groups of nurses. Results of the current study indicated similar findings. Smith-Clark (1988) found that impostor tendencies were normally distributed in her study, a finding mirrored by the current study. Hollingsworth (1995), who split her sample at the mean not the median, reported that 47% of her sample of ET nurses fell above the sample mean on the Clance Scale. A similar percentage (43.4%) fell above the sample median

used as the dividing point in the current study. Hollingsworth concluded that measures of the IP among ET nurses reflected only a minor intensity of impostor manifestations. Engberg (1996) found low levels of the IP among nurse practitioners, as did Ellerie (1997), who concluded that the IP was not significantly high or prevalent among registered nurse first assistants.

In a recent study on perfectionism, impostor feelings, and other measures of psychological distress, Henning, Ey, and Shaw (1998) used the cutoff score suggested by Holmes et al. (1993) to separate impostors from nonimpostors in a sample of 477 health professions undergraduate students. Other than the work by Holmes and associates, the study by Henning and colleagues was the only research located using  $\geq 62$  as a cutoff on the Clance IP Scale. Their sample included medical students ( $n=221$ ), dental students ( $n=102$ ), nursing ( $n=82$ ), and pharmacy students ( $n=72$ ). They reported that 30.2% of their total sample could be classified impostors and that women scored significantly higher than men [ $F(1, n=463) = 19.42, p < .001$ ]. For nursing students, the mean score on the Clance Scale equaled 56.4 ( $SD=14.8$ ). This appears to be a much higher average than the mean of 44.43 obtained with the current sample of licensed RNs. Henning et al. (1998) concluded that a high percentage of students in the health professions reported impostor feelings, particularly among women, and that more research is needed to see if such high rates of impostorism persist beyond initial higher education.

Brookfield (1993) stated that impostor feelings in nurses do not fade with experience. He indicated that "impostorship" is linked with critical thinking processes that have become so important to modern nursing practice. He suggested that when critical thinking is examined "from the inside" (p. 197), threats to self become exposed. Thus, nurses experience critical thinking as strongly emotional as well as cognitive. Brookfield intimated that many nurses experience impostorship to some extent and that impostorship can be crippling when it exists at extreme levels.

No other research was located comparing the incidence of the IP in a specific population using a cutoff score with results obtained using the sample median-split procedure to determine impostorism. The results of this study reflect that the incidence of IP among RN preceptors has been examined from both of these vantagepoints. According to Holmes et al. (1993), use of a median split to divide subjects into high- and low-impostor groups may have diluted results obtained by many IP researchers due to the inclusion of marginal impostors into both groups. In the current study, a difference of 33% exists between the percentage of participants considered to have high impostor tendencies under the median-split procedure and those participants for whom impostorism is at a moderate to intense level using a cutoff score as suggested by the literature (Figures 4.2 & 4.3). Therefore, the research of Holmes et al. to increase the sensitivity of IP instruments by establishing a cutoff score of 62 for the Clance IP Scale as well as the Harvey Impostor Phenomenon Scale (Harvey, 1981) is supported by the findings from the current study.

Another finding was that participants most frequently picked "often true" in answering two of the impostor questions. Question one related to perceived success on a task despite fear of failure prior to beginning the task. Determining the underlying source of such a feeling in nurse preceptors is impossible without further research; yet, this finding suggests the need for nurse managers and nurse educators to provide support and encouragement to novice or prospective nurse preceptors. Question nineteen, to which participants most often answered "often true," dealt with hesitancy to share with others recognition of personal achievement. Were participants in this study merely demonstrating a humble attitude that might be common to nurses in general, or does this finding suggest that these preceptors felt that praise and recognition should originate from others? The literature contains substantial content regarding the importance of providing recognition to nurse preceptors (Brenner, 1995; Kramer, 1993; Limón et al., 1981; Mundy, 1997; O'Mara & Welton, 1995; Shamian & Inhaber, 1985).

Early IP research hypothesized that origins of the IP were gender-related, suggesting females suffered from the phenomenon at a greater rate than did males (Clance & Imes, 1978). Langford and Clance (1993) indicated that studies among several populations had failed to find any differences in impostor feelings between the sexes, implying that the issue was resolved. Henning et al. (1998) found that females were affected by impostorism more often than males; however, the findings in the current study showed no difference between genders. It is evident that conflicting results continue to be reported in the literature.

Question 2: Is there a relationship between the intensity of impostor feelings and demographic, nurse-specific, or preceptor-specific study variables?

Non-parametric correlations. Other than a tendency for IP feelings to be greater among associate and diploma prepared nurses, research has failed to show a significant relationship between academic nursing preparation and the IP (Marcantuono, 1990; Smith-Clark, 1988). Although APNs and NPs had a higher percentage of impostorism, the current study found that levels of nursing education were not significantly associated with the IP. Therefore, factors other than academic education may account for the finding that employment at acute care hospitals correlated positively with total IP score. For example, such a correlation might be related to the inherent stressors of working on large inpatient units. Oermann and Moffitt-Wolf (1997) reported that new graduates orienting with preceptors to the hospital environment ( $n=35$ ) experienced a moderate degree of stress. One stressor, unique to hospital environments, is the frequent practice of assigning preceptors the responsibility for more patients, often with higher acuity, because of the preceptees' presence. Lack of understanding and resentment from other RNs who fail to realize the extra responsibilities and time requirements of the preceptor role can accompany the

increased workload (Stevenson et al., 1995). Hospital environments may lack conditions necessary to support some nurse preceptors.

Results showed that preceptors who work with undergraduate nursing students are less likely to be diploma nurses or have degrees in other fields. This could be attributed to the pairing by nurse managers or nursing faculty of appropriate preceptors with undergraduates (i.e., those with education levels the same as or higher than the student's) (Pond et al., 1993). This idea is strengthened by the positive correlation found between BSN prepared preceptors and working with undergraduate nursing students.

Another finding was that hospital-employed preceptors are more likely to orient new nurse employees whereas master's prepared and family practice or geriatric preceptors were less likely to work with new employees. This could be a function of formally organized orientation programs within hospital settings. Clinics, on the other hand, may place much less emphasis on orientation for new employees because of increased hiring of advanced practice nurses. In an investigation of the potential for preceptors of graduate students to act as mentors, Beauchesne and Howard (1996) reported that approximately 65% of the preceptors ( $n=13$ ) in their study indicated that they were without a mentor once they had completed their own formal education. It is possible that clinic administrators assume that newly employed nurses are well prepared by their advanced education to function with little guidance or orientation to their new positions. The difference in work contexts between hospitals and clinics could also account for this finding. Patient care at clinics often requires less high technology and is usually indirect care focused on a single client entity at a time rather than multiple, complex nursing tasks simultaneously.

The longer participants worked for their current employers, the less likely they were to be employed at clinics. This finding may reflect the recent move of greater numbers of RNs away from acute care hospitals to clinic and community settings (Brewer, 1998). Another finding was that increasing years of RN



experience may lead to decreased numbers of participants practicing in adult nursing settings or working in intensive care areas. Negative correlations such as these obtained here might reflect a tendency towards burnout among nurses working in physically taxing and stressful adult, intensive care settings. Rummel (1991) reported that hardiness, a stress resistance factor, significantly correlated with health-promoting behavior in RNs. Psychological stress, ways of coping, RN experience, and experience in current nursing position were significantly associated with factors that measure health promotion in hospital nurses (Vines, 1991).

Only the primary role of education was significantly related to factors such as preceptor role preparation, total hours of such preparation, and the greatest number of preceptees simultaneously. Educators love to teach and so may seek training as preceptors. Perhaps educators in this study who acted as preceptors received more preparation than nurses in other roles due to their need to educate others about preceptorships. Such knowledge enhances their ability to function in the preceptor role. Possessing enhanced capabilities appears to be reflected in the greater numbers of preceptees with whom they are willing and capable of working.

Across the career span, working with greater total numbers of preceptees was associated with training undergraduate nursing students, as was greater numbers of preceptees worked with simultaneously. The pairing of BSN preceptors with greater numbers of preceptees at a time suggests that BSN prepared preceptors are asked to handle responsibilities associated with assisting faculty to prepare large groups of undergraduate student nurses (Pond et al., 1993). Together, these findings may indicate that undergraduate nursing programs use preceptorships extensively because of greater flexibility in the types of courses offered, such as management and teaching, and greater time spent in academic coursework compared with associate or diploma programs.

The negative relationship between RNs with diploma nursing education and greater cumulative number of preceptees worked with might be related to little formal emphasis on the teaching of other health care professionals during the course of a diploma program. Limón et al. (1981) stated that the preceptor role builds on the teaching component of nursing practice. It is speculated that, over time, preparation to teach primarily patients rather than staff could result in less involvement by diploma prepared nurses in orienting others.

Parametric Correlations. Only one variable correlated significantly with participants' IP scores. Self-perceived qualification for enacting the preceptor role was weakly associated with participants' IP scores. Such a finding gives support to the idea that persons classified as impostors lack self-esteem regarding their capability for achievement-related tasks (Langford & Clance, 1993). RN preceptors fitting the definition of impostor may believe they are actually not qualified to train others, but may become involved for other reasons. They may be motivated by the rewards and satisfactions associated with functioning as preceptor (Stevenson et al., 1995) or the need to "look smart to others" (Langford & Clance, 1993, p. 498).

Participants' length of preceptor experience (months) was moderately associated with time in the present type of nursing. Length of preceptor experience was weakly associated with length of employment in the current organization. These two correlations are in agreement with preceptor literature indicating that competent nurses, who demonstrate stability by working on their units at least one year but often as many as five to 10 years, function as preceptors (Shamian & Inhaber, 1985). While number of years in clinical practice does not necessarily equate to the competency required for the preceptor role (Myrick & Barrett, 1994), Kramer (1993) stated that preceptor positions are usually reserved for nurses on the highest level of the clinical ladder.

Results showed that a moderately positive relationship existed between the number of preceptees trained at one time and length of preceptor

experience, as well as between the number of preceptees trained at one time and hours of preceptor preparation. These results suggest that the more experienced and well prepared preceptors are for their teaching role, the more they are able to handle working with more than one learner at a time. Contrary to most preceptor literature (Brasler, 1993; Byrd et al., 1997; Clayton et al., 1989; Limón et al., 1981) suggesting that one-on-one preceptorships are most desirable, the RNs in this study derived greater satisfaction from the preceptor role as they worked with greater numbers of preceptees at a time.

Role satisfaction of preceptors in this study, however, decreased as length of employment with current organization increased. Such a finding may indicate a trend of preceptor burnout. Registered nurses who agree to serve as preceptors may eventually feel overworked, overwhelmed, and underpaid, conditions that lead to professional burnout (Byrd et al., 1997). On the other hand, the more qualified for teaching the participants felt, the more satisfaction they received from serving in the preceptor role. This relationship serves as a reminder that people like to do what they feel they are good at. According to HPM research, self-efficacy is a predictor of health promoting behaviors (Palank, 1991; Weitzel & Waller, 1990). High levels of self-efficacy concerning one's performance also encourages the enactment of similar activities (Pender, 1996). Providing positive reinforcement to preceptors with the goal of improving self-efficacy and self-confidence about working with preceptees can lead to greater satisfaction for preceptors and preceptees (Ferguson, 1996).

Question 3: What differences exist among study variables between nurse preceptors identified as impostors and nurse preceptors identified as non-impostors?

Testing for differences among the two groups classified as impostors and non-impostors involved the t-test for independent samples and the chi-square test for independence. Due to the small number in the impostor group, it was

possible with the chi-square statistic to show a lack of significant difference between groups in only four variables: diploma education, BSN education, training undergraduate nursing students, and orienting new employees. In these aspects, those who reported greater impostor feelings were no different from their peers who shared the preceptor role. Significant educational differences in nurses with respect to the IP have not been reported. However, Smith-Clark (1988) found a greater tendency for the diploma nurses in her sample ( $n=30$ , 53.3%) to fit into the high impostor category whereas the BSN prepared nurses ( $n=20$ , 65%) tended to fit into the low impostor group.

Nevertheless, the IP has been linked to social mobility (Clance et al., 1995), a concept connected to advancement via educational preparation. Clance and colleagues suggested that, given familial and social expectations for marriage and family, it is not surprising to find that women who achieve social mobility through educational and career attainment are more vulnerable to the IP than men.

The t-test indicated that the only significant difference between groups concerned self-perceived qualification for the preceptor role. This finding supports the concept that impostorism affects individuals who are unrealistically insecure about themselves in achievement situations (Langford & Clance, 1993). Because an individual's sense of self-efficacy influences feelings of competency over a specific behavior (Maddux, 1995), the lower self-perceived qualifiability for teaching others, demonstrated by the participants who fit the definition of impostor, reflects a central construct of the IP. The results of the current study suggest that the IP does, indeed, center on feelings of competency related to one's achievements, in addition to feelings of intellectual fraudulence.

### Conclusions

A significant negative correlation was found between the IP and RN preceptors' self-perceived qualification for the preceptor role. Likewise,

perception of qualification for the role was the only significant difference between preceptors identified as impostors and those identified as nonimpostors.

However, based on an essentially normal distribution of the IP among RN preceptors in this study, as well as the finding that only about 10% of the sample could be classified as impostors, the conclusion must be reached that little incidence of the phenomenon occurs among the nurses studied. In general, then, the IP seems to be a minor problem for most preceptors who participated in the current study. However, for persons caught in the phenomenon's cycle, living life under the burden of moderate to intense impostorism, the IP literature would suggest that significant psychological distress does exist. In light of this, specific recommendations for further research are offered at the conclusion of this chapter.

### Conceptual Framework

This study used Pender's Health Promotion Model (HPM) (Pender, 1996) as a conceptual framework. The HPM provided a means to understand the potential impact of the IP upon individuals affected by impostor tendencies. The elements of such impact included the IP's effect on perceptions of self-efficacy, benefits and barriers to taking actions that promote health, and activity- or task-related emotions. In addition, the HPM helped explain the cyclical nature of the IP through the principle known as triadic reciprocal causation (Bandura, 1986) upon which the HPM is partly founded.

However, full usefulness of the HPM was not realized by this study because its design did not include actual research into the health promoting behaviors of RN preceptors. Furthermore, findings from this study are difficult to associate with findings from the HPM research due to few points of commonality. Nevertheless, the HPM is an inherently valuable framework in understanding the physical, emotional, and spiritual health of individuals who suffer from the most intense levels of the IP. Though few (10.1%) nurses experienced the IP at

moderate to intense levels in this study, these would be the individuals for whom the IP would produce the greatest threats to overall health.

### Limitations

Due to low external validity (Burns & Grove, 1997), caution is offered about generalizing the study results or implications of the research findings beyond the sample population. In addition, both parts of the Nurse Preceptor Questionnaire used in this study relied on the willingness of the participants to accurately report their feelings and experiences about their preceptorship experiences. The existence and strength of the IP among RN preceptors as investigated by this study can only be deemed as valid as the participants desired to reveal.

Data entry and analysis revealed problems with Part I of the Nurse Preceptor Questionnaire despite pilot testing of the tool. For example, many participants provided more than one response to their primary nursing role and the usual type of preceptees. The questionnaire had asked preceptors to check all categories that applied under nursing education. Determining the participants' major practice responsibility or the education level of their principal learners was then difficult. Asking participants to specify the length of their preceptor experiences in months resulted in preceptors often answering in terms of years and, occasionally, omitting this item. The item was intended as a mechanism to gauge experience levels as in a continuum from novice to expert. However, it seemed too difficult for many to comprehend the length of their experience in months.

Most importantly, this study was conducted using only 19-items on the Clance IP Scale and used a cutoff score five points lower than suggested by the literature. Therefore, discretion is advised in comparing these findings to other IP research.

### Implications for Nursing Practice

Individuals functioning successfully in a particular role (i.e., preceptors with working knowledge) are the best persons to socialize beginners into that role. Novice staff nurses cannot effectively learn their role requirements from nurses in management or staff development positions (Limón et al., 1981). Advantages for student nurses related to collaborative relationships between nursing faculty and preceptors are documented (Nehls et al., 1997). Given the responsibilities of the preceptor role, it is evident that preceptors may contribute as much or more to the growth and development of inexperienced nurses than do instructors of nursing.

Thus, it is imperative that preceptors receive adequate preparation for their role. The lack of formal preparation reported by a high percentage (75%) of preceptors in this study suggests it may be all too easy to assume that preceptors are fully qualified to train others. Nursing educators and management must continually assess the adequacy of training provided to preceptors. Workshops and inservice offerings to train new preceptors should be offered routinely as well as classes geared to enhancing the development of experienced preceptors. Collaborative efforts between healthcare entities and university schools of nursing to provide continuing education for preceptors would maximize effective use of joint financial and human resources.

The literature is replete with discussion regarding the need for supporting nurse preceptors (Brenner, 1995; Limón et al., 1981; Mundy, 1997; Stevenson et al., 1995; Young, Theriault & Collins, 1989). The concept of effective support for preceptors begins with adequate role preparation. But, effective support also calls for increased awareness of preceptor role demands and stressors, encouragement for preceptors, and tangible rewards as well as personal recognition.

The implications of the research findings from the current study can be useful to nurse preceptors, staff development personnel, other nurse educators,

nurse managers, and nursing faculty to foster greater awareness of the IP and improved understanding of impostor feelings among nurse preceptors. Informed nursing leaders can support nurses who negate comments about their qualifications for preceptor roles (Clance & O'Toole, 1988) by assisting them to explore their feelings about sharing their nursing expertise. Nurse managers or educators who observe preceptors exhibiting impostor tendencies can comment on the existence of the IP and can offer further information to the preceptor using the IP literature. Support groups can be effective in the long-term resolution of impostor tendencies (Clance & Imes, 1978; Clance et al., 1995). Where enough nurse preceptors or other RNs with impostor tendencies may be employed, nursing leadership can advocate for the formation of a support group as well as professional guidance for the group.

#### Recommendations for Further Research

This current study has been beneficial for all who would seek to understand those who "wear an external mask of control, while knowing that (they) are really frail figures, struggling to make sense of the chaos that surrounds us" (Brookfield, 1993, p. 199). The existence of impostor tendencies among RNs serving as nurse preceptors points to the need for deeper understanding of impostorism in nurses and for supportive empathy for those experiencing the phenomenon. Based on the findings of this study and the nature of the IP, the following recommendations for future research are presented:

1. The study should be replicated in different geographical locations and among preceptors employed by other large healthcare systems.
2. Studies that measure the IP as well as the variables within the HPM (using the latest version of the Health Promotion Lifestyle Profile) would be instrumental in evaluating relationships between impostorism and health promoting behaviors. Such research, among nurses in general, various



subgroups of nurses, or other healthcare professionals, would help evaluate the deleterious health effects of the phenomenon.

3. Finally, because this and several other nursing research studies have established that impostor tendencies seem to affect most nurses only to a very mild or moderate extent, increased attention should be given to those nurses experiencing intense levels of IP. This would be best accomplished by thoroughly investigating the lived experience of nurses who continue to practice despite high levels of impostorism. Therefore, it is highly recommended that the IP among such nurses be studied in a qualitative manner, using a phenomenological method.

### Summary

This study explored the incidence of the impostor phenomenon among a sample of 129 RNs functioning as nursing preceptors. Results obtained using the Clance IP Scale indicated that about 10% ( $n=13$ ) of the participants fit the definition of impostor used in this study. A significant, weak negative correlation was found between impostorism and self-perceived qualification for the preceptor role. The only significant difference between preceptors classified as impostors versus those classified as nonimpostors was their perception of qualifiability to enact the preceptor role.

Chapter V discussed the findings of the study in relation to the literature as well as the HPM, used as the conceptual framework for the study. This framework contributed to understanding the health-related implications for preceptors who experience feelings of impostorism. Implications for nursing practice derived from these findings were explored. The researcher concluded by describing study limitations and by offering suggestions for future research.

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APPENDIX A  
IRB APPROVAL

FORM A - MUST BE TYPED

REQUEST FOR REVIEW OF RESEARCH PROPOSAL INVOLVING HUMAN SUBJECTS

Protocol for Presentation to the TTUHSC Institutional Review Board (IRB)  
TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER - ASSURANCE NO: M-1078

Please submit an original plus twenty (20) copies of this completed form to the OFFICE OF SPONSORED PROGRAMS (OSP), HSC 2C-169 on or before 9:00 a.m. Monday preceding the second Thursday of the month. The Subcommittee meets on the second Thursday of each month and the IRB meets on the fourth Wednesday of each month. November and December meetings are subject to change. All applications must be reviewed by the Subcommittee prior to full Board review.

1. TITLE OF STUDY (150 character limit): The Impostor Phenomenon: A Descriptive Study of Its Incidence among Registered Nurse Preceptors
2. NAMES, TITLES AND DEPARTMENT AFFILIATION OF EACH INVESTIGATOR, ASSOCIATES AND ASSISTANTS BEGINNING WITH THE PRINCIPAL INVESTIGATOR: (NOTE: The Principal Investigator MUST be a faculty member - Trainee, student, resident, fellow, etc., may not be a Principal Investigator.) Kristi D. Menix, RN, EdD, MSN, CNA; Associate Professor of Clinical Nursing, School of Nursing. Michele M. Even, RN, BSN, Master's Candidate, School of Nursing.

INVESTIGATOR AGREEMENT: I hereby give assurance that I will comply with the regulations of Texas Tech University Health Sciences Center and the Department of Health and Human Services (HHS) for protection of human subjects with respect to the conduct of this study. I further certify to the following:

- The proposed research project will be conducted by me or under my close supervision.
- The proposed research project will be conducted in accordance with the protocol submitted to and approved by the Institutional Review Board.
- Changes or modifications in the research project during the period for which IRB approval has been granted shall not be initiated without prior IRB review and approval, except where necessary to eliminate appropriate immediate hazards to the subjects.
- Any significant findings that become known in the course of the research that might affect the willingness of subjects to participate, or once enrolled, to continue to take part, will be promptly reported to the IRB.
- Report immediately to the Board, via the OFFICE OF SPONSORED PROGRAMS, any unanticipated problems involving risk to subjects or others, including adverse reactions to biologicals, drugs, radioisotope labeled drugs or medical devices.
- All investigational drugs/devices being used on an inpatient basis must be kept in the UMC pharmacy, this procedure is also recommended (not required) for investigational drugs/devices being used on an outpatient basis. The Principal Investigator is required to send an approved IRB protocol to the UMC pharmacy before inpatient studies begin.
- No human being will be involved as a research subject unless legally effective Informed consent of the subject has been obtained.
- Signed consent forms will be retained in a confidential manner in departmental files for audit by the IRB or authorized officials from the granting agency, FDA, HHS, etc. Records will be kept for a minimum of five (5) years after completion of the study. THESE ARE CONSIDERED INSTITUTIONAL RECORDS AND SHOULD NOT BE TRANSFERRED TO ANOTHER INSTITUTION WITH THE PRINCIPAL INVESTIGATOR UNTIL THE ENTIRE PROJECT IS TRANSFERRED WITH THE GRANTING AGENCY'S APPROVAL.
- Ongoing protocols are subject to at least yearly review by the Board. This is a rule of HHS for federal government grants, but institutional policy further applies it to any study involving human subjects, whether funded or not.
- The Institutional Review Board will be notified upon completion of the study and a final report will be submitted.
- The Institutional Review Board shall have the authority to suspend or terminate approval of the research project if it is not being conducted in accordance with the IRB's decision, conditions and requirements. The IRB shall report promptly any suspension/termination of IRB approval or frequent/flagrant noncompliance with FDA or IRB requirements to the Health Sciences Center Administration and to the Food and Drug Administration.

MY SIGNATURE BELOW AFFIRMS THAT I HAVE READ AND WILL COMPLY WITH THE ABOVE STATEMENTS.

Kristi D. Menix 11-20-98 John Lee 11-23-98  
Principal Investigator Date Department Chair Date

I certify that the principal investigator is knowledgeable in this area and will employ sound scientific methods in the conduct of this research.

IF MORE THAN ONE DEPARTMENT IS INVOLVED IN THIS STUDY:

Co-investigator \_\_\_\_\_ Date \_\_\_\_\_ Department Chair \_\_\_\_\_ Date \_\_\_\_\_

Co-investigator \_\_\_\_\_ Date \_\_\_\_\_ Department Chair \_\_\_\_\_ Date \_\_\_\_\_

DO NOT WRITE BENEATH THIS LINE

ACTION OF COMMITTEE

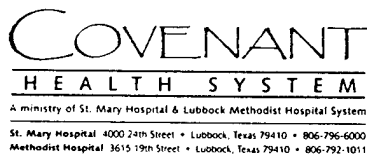
CODE NO: 99056 Date Reviewed by IRB: 12/3/98 Date Approved by IRB: 12/3/98 APPROVAL is for: 1 year or \_\_\_\_\_ months

EXEMPT: 46.101(h)(2) EXPEDITED: \_\_\_\_\_ RISK assigned: \_\_\_\_\_

Duration: 1 yr Subjects approved: 325 Controls approved: 8 SPANISH consent form: ☐ Yes ☐ Optional

CONTINUING REVIEW due: 12/2/99 (approximately) Shirley M. Phillips 12-3-98  
Signature of Authorized IRB Representative Date

APPENDIX B  
HEALTH SYSTEM APPROVAL



November 16, 1998

Michele M. Even, RN, BSN  
2510 Woodlake  
Abilene, TX 79606

Dear Michele M. Even:

Permission has been granted by the Administration of Covenant Health System to conduct your Master's research among Registered Nurses employed by Covenant Health System. Covenant realizes this study involves an anonymous, voluntary questionnaire to be completed by RNs who function as nurse preceptors. Furthermore, Covenant understands the questionnaire's purpose is to gather data from RN preceptors about their experiences and feelings regarding precepting in order to determine the extent of the imposter phenomenon among nurse preceptors.

This letter authorizes Nurse Managers, Nurse Educators, and/or Department Directors to distribute the questionnaire to RNs functioning as nurse preceptors at St. Mary and Methodist hospitals. When your questionnaire is ready for distribution, please deliver the survey materials to the secretary in the Nursing Administration office. If you fail to receive the number of completed surveys needed for your thesis, please let me know and I will encourage the preceptors to complete the survey and submit it.

Sincerely,

A handwritten signature in cursive script that reads "D. McKinney" followed by a stylized flourish.

Deanna McKinney, RN, MS  
Senior Vice President  
Covenant Health System

APPENDIX C  
COVER LETTER

January 3, 1999

Dear Nursing Colleague,

I am seeking your help with a research study. As a graduate student in the School of Nursing at Texas Tech University Health Sciences Center, my master's thesis investigates the experiences and feelings of RN nurse preceptors. Nurse preceptors are sanctioned by their organizations to fulfill important responsibilities. These responsibilities usually include teaching, counseling, inspiring, role modeling, and supporting the growth and development of new nurses, nursing students, or nurses cross-training in the clinical setting. Preceptors guide learners toward long-term goals through focused clinical experiences over time.

Precepting can be satisfying. Studies suggest that high-achieving individuals differ in the degree to which they are able to internalize a sense of satisfaction from their successes. The enclosed questionnaire reflects factors about which nurse preceptors may have distinctly different views related to precepting and career satisfaction. As a RN, you are eligible to participate in this study if you have been a preceptor in any setting, unless all RNs where you work participate equally in precepting.

The questionnaire generally takes less than 10 minutes to complete. Your consent to participate in this research is implied by filling out the questionnaire and returning it to me in the self-addressed, stamped envelope. As you can see, the questionnaire has **NO** place for your name; the number is the only way the researcher can identify you. Anonymity and confidentiality of your responses are guaranteed.

Participating in this study is voluntary and unpaid; however, preceptors may benefit from realizing this research seeks to increase knowledge regarding feelings and experiences of nurse preceptors that may be useful to enhance support for preceptors. Please accept the original, custom-designed bookmark as a token of my appreciation for your help.

Please read the directions carefully, checking all the appropriate boxes or filling in all the blanks as indicated. Try to keep your preceptor role in mind. Accuracy and completeness are very important, since reliable conclusions in my thesis depend upon reliable data. I will answer any questions you may have about the project or your participation in it at any time. You may contact me by telephone at (915) 695-3406 or e-mail at MevenO3@aol.com.

Your personal willingness to support my research by completing and returning the questionnaire in the stamped, addressed envelope before January 15, 1999, is greatly appreciated.

Sincerely,

Michele M. Even, RN, BSN  
Graduate Student, TTUHSC, School of Nursing

APPENDIX D  
NURSE PRECEPTOR QUESTIONNAIRE

PARTICIPANT # \_\_\_\_\_

## NURSE PRECEPTOR QUESTIONNAIRE

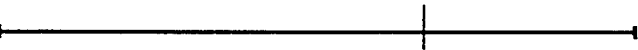
### Part I

1. GENDER:  
☐ MALE    ☐ FEMALE
2. AGE (in years): \_\_\_\_\_  
(please specify)
3. NURSING EDUCATION:  
(check all that apply)  
☐ ADN  
☐ DIPLOMA  
☐ BSN  
☐ MSN  
☐ DOCTORATE  
☐ OTHER: \_\_\_\_\_  
(please specify)
4. YEARS RN EXPERIENCE: \_\_\_\_\_
5. YEARS EMPLOYED WITH CURRENT ORGANIZATION: \_\_\_\_\_
6. YEARS EMPLOYED IN PRESENT TYPE OF NURSING: \_\_\_\_\_
7. CURRENT EMPLOYMENT:  
☐ NOT EMPLOYED  
☐ PART TIME (< 36 hr/week)  
☐ FULL TIME (≥ 36 hr/week)
8. EMPLOYMENT SETTING:  
☐ ACUTE CARE HOSPITAL  
☐ CLINIC  
☐ NURSING SCHOOL  
☐ PHYSICIAN'S OFFICE  
☐ HOME HEALTH AGENCY  
☐ NURSING HOME OR EXTENDED CARE  
☐ PRIVATE PRACTICE  
☐ COUNTY, STATE, OR FEDERAL GOVERNMENT  
☐ OTHER: \_\_\_\_\_  
(please specify)
9. PRIMARY NURSING ROLE:  
☐ ADULT  
☐ MATERNAL/NEWBORN  
☐ PEDIATRICS  
☐ GERIATRICS  
☐ INTENSIVE CARE  
☐ EDUCATION  
☐ OTHER: \_\_\_\_\_  
(please specify)
10. MONTHS EXPERIENCE AS A PRECEPTOR: \_\_\_\_\_  
(please specify)
11. WHO DO YOU NORMALLY PRECEPT?  
☐ UNDERGRADUATE STUDENTS  
☐ NEW NURSE EMPLOYEES  
☐ GRADUATE STUDENTS  
☐ NURSE PRACTITIONER STUDENTS  
☐ CROSSTRaining NURSES  
☐ OTHER: \_\_\_\_\_  
(please specify)
12. HOURS OF FORMAL PREPARATION OR TRAINING FOR PRECEPTOR ROLE:  
☐ NO SPECIFIC TRAINING  
☐ IF YES, APPROXIMATE HOURS: \_\_\_\_\_  
(please specify)
13. APPROXIMATE TOTAL NUMBER OF INDIVIDUALS PRECEPTED DURING CAREER: \_\_\_\_\_  
(please specify – best guess)
14. GREATEST NUMBER OF STUDENTS PRECEPTED AT ONE TIME: \_\_\_\_\_




PARTICIPANT # \_\_\_\_\_


For the next two questions, please answer by marking across the line. Example:

Negative  Positive

15. OVERALL, HOW SATISFIED ARE YOU WITH THE PRECEPTOR ROLE?

Hate being a preceptor  Love being a preceptor

16. OVERALL, HOW QUALIFIED DO YOU FEEL TO BE A PRECEPTOR?

Low  High

## Part II

Please answer the questions as honestly as possible. A rating of 1 means the previous statement is not at all true; a rating of 5 means the previous statement is very true; and an answer of 2, 3, or 4 represents the range where the statement may be true rarely, sometimes, or often.

Please mark the box according to the way the statement applies to you. It is best to give the first response that enters your mind rather than dwelling on each statement and thinking about it over and over.

	1 Not at all True	2 Rarely True	3 Sometimes True	4 Often True	5 Very True
1. I have often succeeded on a test or task even though I was afraid that I would not do well before I undertook the task.					
2. I can give the impression that I'm more competent than I really am.					
3. I avoid evaluations if possible and have a dread of others evaluating me.					
4. When people praise me for something I've accomplished, I'm afraid I won't be able to live up to their expectations of me in the future.					
5. I sometimes think I obtained my present position or gained my present success because I happened to be in the right place at the right time or knew the right people.					
6. I'm afraid people important to me may find out that I'm not as capable as they think I am.					

PARTICIPANT # \_\_\_\_\_

	1 Not at all True	2 Rarely True	3 Sometimes True	4 Often True	5 Very True
7. I tend to remember the incidents in which I have not done my best more than those times I have done my best.					
8. I rarely do a project or task as well as I'd like to do it.					
9. Sometimes I feel or believe that my success in my life or in my job has been the result of some kind of error.					
10. It's hard for me to accept compliments or praise about my intelligence or accomplishments.					
11. At times, I feel my success has been due to some kind of luck.					
12. I'm disappointed at times in my present accomplishments and think I should have accomplished much more.					
13. Sometimes I'm afraid others will discover how much knowledge or ability I really lack.					
14. I'm often afraid that I may fail at a new assignment or undertaking even though I generally do well at what I attempt.					
15. When I've succeeded at something and received recognition for my accomplishments, I have doubts that I can keep repeating that success.					
16. When I've succeeded at something and received recognition for my accomplishments, I have doubts that I can keep repeating that success.					
17. I often compare my ability to those around me and think they may be more intelligent than I am.					
18. I often worry about not succeeding with a project or on an examination, even though others around me have considerable confidence that I will do well.					
19. If I'm going to receive a promotion or gain recognition of some kind, I hesitate to tell others until it is an accomplished fact.					
20. I feel bad and discouraged if I'm not "the best" or at least "very special" in situations that involve achievement.					

©Pauline Rose Clance (used with permission)

APPENDIX E  
PERMISSION LETTERS

Pauline Rose Clance, PhD  
Department of Psychology  
Georgia State University  
University Plaza  
Atlanta, GA 30303

Michele M. Even  
2510 Woodlake Drive  
Abilene, TX 79606-4302

Dear Michele:

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